



INSTITUTE OF TECHNOLOGY OF CAMBODIA

The 33rd Meeting Board of Trustees

Phnom Penh, 26 June 2025

Report of Director 2024-2025

Complementary documents:

- General & Pedagogical Documents
- Financial Report



INSTITUTE OF TECHNOLOGY OF CAMBODIA

The 33rd Meeting Board of Trustees

Phnom Penh, 26 June 2025

Report of Director 2024-2025

Complementary Documents:

- General and Pedagogical Documents
- Financial Report

Table of Contents

Table of Contents	i
List of Tables	iv
List of Figures.....	v
List of Annex.....	vi
Agenda of CA 2025	viii
Members of CA 2025	ix
1. Summary of activities – Current state.....	1
1.1. Remarkable events at ITC in 2024-2025.....	3
1.1.1. Launching the Cambodian Cyber University Network (CCUN).....	3
1.1.2. The 60 th Anniversary Celebration of ITC	3
1.1.3. The 3rd International Conference on Earth Resources and Geo-Environment Technology 2024 (EraGET2024)	4
1.1.4. Life Mechatronics Symposium	5
1.1.5. Construction of the Center of Research and Technology Transfer at another ITC campus	6
1.1.6. Another Campus of ITC in Kep Province.....	6
1.1.7. An Award for ITC Robot Team	7
1.1.8. MOU Signing Ceremony with University of Central Missouri, USA	8
1.1.9. MOU Signing Ceremony with Macquarie University, Australia.....	9
1.1.10. Inauguration of Air Conditioner Training Center and MOU Signing Ceremony with Panasonic Company.....	9
1.1.11. High-level World Bank visit to the Cambodia Institute of Technology.....	10
1.1.12. World Bank Study Visit to the Institute of Technology of Cambodia	10
1.1.13. ITC, host institute for the research panel in Asia	11
1.1.14. The 14 th Scientific Day	12
1.1.15. Honda Y-E-S Award Program 2024.....	12
1.1.16. Admission to Ecole Polytechnique	13
2. Recruitment, Evolution of Number of Students and Others Activities.....	15
2.1. Recruitment in 2024-2025.....	16
2.1.1. Preparation of Entrance Exam.....	16
2.1.2. Registration to the exam.....	16
2.1.3. Result of the Entrance Exam.....	17
2.1.4. Enrollment in 1st Year	17
2.1.5. Remark and Conclusion	18
2.2. Pathway to 3rd Year Engineering Program.....	19
2.2.1. Pass from T2 to 3rd Year Engineering.....	19
2.2.2. Entry into 3 rd Year Engineering Program	19
2.3. Total number of students in 2024-2025	20
2.4. Final Exam (End of Semester)	22

2.5.	Continuing Education.....	22
2.6.	Preparation of ITC students for exam of Grandes Ecoles in France	24
2.7.	Preparation for the exam of Japanese Government Scholarship	25
2.8.	Scholarships and exemption of tuition fee	26
2.9.	Activities Report of E-learning Center.....	26
2.9.1.	Background	26
2.9.2.	Cambodian Cyber University Network (CCUN)	27
2.9.3.	Activities 2024-2025	28
2.9.4.	E-learning Content	29
2.9.5.	E-learning Content operation	29
2.10.	Activities of library of ITC.....	30
3.	Educational Report	33
3.1.	Overview of teaching/research staffs at ITC	34
3.1.1.	Number of lecturers/researchers.....	34
3.1.2.	Lecturers/researchers graduated from different countries.....	35
3.1.3.	Conclusion.....	36
3.2.	Student Employability	36
3.3.	Graduate School of ITC	37
3.3.1.	Introduction	37
3.3.2.	Summary of Realized Activities in 2024-2025	38
3.3.3.	Master Programs	40
3.3.3.1.	Overview.....	40
3.3.3.2.	Program M-MSE.....	47
3.3.3.3.	Program M-ETM	49
3.3.3.4.	Program M-WEE	51
3.3.3.5.	Program M-AIE	52
3.3.3.6.	Program M-ECS	54
3.3.3.7.	Program M-MIC	56
3.3.3.8.	Program M-TIE.....	58
3.3.3.9.	Program M-DAS.....	59
3.3.4.	Doctoral Programs.....	61
3.3.4.1.	Overview.....	61
3.3.4.2.	Program D-WAE	65
3.3.4.3.	Program D-ETM	67
3.3.4.4.	Program D-FTN.....	69
3.3.4.5.	Program D-MIT	71
3.3.4.6.	Program D-MSS	74
3.3.5.	Challenges	76
3.3.6.	Conclusion.....	76
4.	Capacity Building and Professor Dispatch	77
4.1.	Capacity Building (2024-2025).....	78
4.1.1.	Long-term overseas capacity building for lecturers and students	78
4.1.2.	Short-term overseas capacity building for lecturers and students.....	78
4.2.	Professor dispatch at ITC (2024-2025)	78
5.	Research and Innovation Center	80

5.1.	Overview	81
5.2.	Research Performance & Key Metrics	81
5.2.1.	Research Fund	81
5.2.2.	On-going Research Projects	82
5.2.3.	Research Publication	84
5.2.4.	Research Impact	85
5.3.	Research Capabilities	88
5.3.1.	Researchers.....	88
5.3.2.	Research Facilities.....	89
5.4.	High Impact Research and Innovation Projects	90
5.4.1.	Establishment of Risk Management Platform for Air Pollution in Cambodia	90
5.4.2.	Cambodian Coastal Research Center (CCRC).....	91
5.4.3.	Higher Education Improvement Project (HEIP)	92
5.4.4.	Provincial Water Supply and Sanitation Project – PWSSP	93
5.4.5.	Platform for research and training on power system in Cambodia	94
5.4.6.	Industry-Academic-Community Networks (INACON) Project	94
5.4.7.	ARES Project	95
5.5.	Techno Incubation Center	98
5.6.	Conclusion.....	100
6.	National and International Cooperation	101
6.1.	Memorandum of Understanding and Memorandum of Agreement	102
6.2.	Foreign Students and Institutions at ITC.....	103
6.2.1.	Foreign students at ITC	103
6.2.2.	Foreign Organizations on ITC campus	103
6.3.	Collaboration with industries	104
6.3.1.	Seminars and Workshops	104
6.3.2.	Industry Engagement and Visits	105
6.3.3.	Collaborative Projects, Training and Consulting Programs	105
6.3.4.	Memoranda of Understanding and Memoranda of Agreement	105
6.3.5.	Flagship Events	106
6.3.6.	Strategic Directions for 2025 and Beyond	106
6.3.7.	Conclusion.....	106
Annex.....		107

List of Tables

Table 1. Number of students enrolled to 1st Year of International Program.....	17
Table 2. Number of students enrolled to 1st Year at ITC-Tbong Khmum.	18
Table 3. Number of students enrolled to 1st Year at ITC-Kep.	18
Table 4. Number of technician graduates accepted to 3 rd Year Engineering Program.	19
Table 5. Actual number of 3 rd year engineering students.	20
Table 6. Total number of students in 2024-2025 at ITC-Phnom Penh.	20
Table 7. Total number of students in 2024-2025 at ITC-Tbong Khmum.	21
Table 8. Number of Reorientation of Engineering and Technician students.	21
Table 9. Total number of students in June 2025 (ITC-Phnom Penh).	21
Table 10. Number of students enrolled in the Continuing Education Program.	22
Table 11. Number of awardees of Japanese Government Scholarship 2024.	25
Table 12. Different Scholarships at ITC.	26
Table 13. Number of lecturers/researchers in different departments in 2024-2025.	34
Table 14. Activities of UIL collaboration with industries from June 2022 to May 2025.	104

List of Figures

Figure 1. Number of Candidates registered in the entrance exam at ITC-Phnom Penh.	16
Figure 2. Evolution of number of successful candidates the last 10 years.	17
Figure 3. Number of students enrolled and graduated in continuing education (GCI).....	23
Figure 4. Number of students enrolled and graduated in continuing education (GEE).....	23
Figure 5. Number of students enrolled and graduated in continuing education (GCA).	23
Figure 6. Number of students enrolled and graduated in continuing education (GIM).....	24
Figure 7. Number of ITC students integrated in an engineering school since 2007-2008.....	25
Figure 8. Evolution of Number of Lecturers/Researchers.	34
Figure 9. Evolution of number of PhD and Master holders.	35
Figure 10. ITC lecturers/researchers graduated from different countries.	36
Figure 11. Engineering students graduated in 2023-2024.	37
Figure 12. Technician students graduated in 2023-2024.	37
Figure 13. Research budget for 2024-2025 and budget total of new projects 2024-2025.....	82
Figure 14. Research projects by each research unit (2024-2025).	83
Figure 15. Number of completed and new projects in 2024-2025.....	83
Figure 16. Number of publications in last 5 years.	84
Figure 17. Percentage of category of researchers	88
Figure 18. Number of researchers and research projects in last 5 years.	88
Figure 19. Overview of Air Quality Monitoring in Phnom Penh, Cambodia.....	90
Figure 20. Specific location for PM sensor installation.....	91
Figure 21. Locations of CCRC proposed campuses.	92
Figure 22. International Symposium on “Water Supply and Sanitation”.	93
Figure 23. MoU signing ceremony between ITC and General Department of Water Supply, MISTI.....	94

List of Annex

Annex 1. Minutes of the International Consortium Meeting on 26-27 March 2025.	108
Annex 2. Minutes of meeting of the 32 nd Board of Trustees Meeting on 27 June 2024.....	124
Annex 3. Overview of CA 2024 Decision and Recommendation of Consortium 2025.	133
Annex 4. Minutes of CEVU Meeting.	146
Annex 5. List of Lecturer and Supervisors of GS for Master Programs.	148
Annex 6. List of Master Thesis.	153
Annex 7. List of Master Publications.....	157
Annex 8. List of Lecturers and Supervisors PhD.....	159
Annex 9. List of PhD Thesis.	162
Annex 10. List of Publications by PhD students.	164
Annex 11. ITC lecturers in overseas post-graduate program (2024-2025).....	168
Annex 12. ITC students in overseas post-graduate program (2024-2025).	169
Annex 13. Short-term overseas capacity building for lecturers (2024-2025).....	175
Annex 14. Short-term overseas capacity building for students (2024-2025).....	184
Annex 15. Dispatch Professor at ITC (2024-2025).	189
Annex 16. Detail information on research vision, mission, research interests of ETM Unit.	191
Annex 17. Detail information on research vision, mission, research interests of FTN Unit.	195
Annex 18. Detail information on research vision, mission, research interests of MIT Unit.	200
Annex 19. Detail information on research vision, mission, research interests of MSS Unit.....	204
Annex 20. Detail information on research vision, mission, research interests of WAE Unit.....	208
Annex 21. New Research Projects in 2024-2025 of ETM Unit.....	214
Annex 22. New Research Projects in 2024-2025 of FTN Unit.	215
Annex 23. New Research Projects in 2024-2025 of MIT Unit.....	216
Annex 24. New Research Projects in 2024-2025 of MSS Unit.	217
Annex 25. New Research Projects in 2024-2025 of WAE Unit.	219
Annex 26. List of Ongoing Projects in ETM in 2024-2025.....	223
Annex 27. List of Ongoing Projects in FTN in 2024-2025.	225
Annex 28. List of Ongoing Projects in MIT in 2024-2025.....	228
Annex 29. List of Ongoing Projects in MSS in 2024-2025.	230
Annex 30. List of Ongoing Projects in WAE in 2024-2025.....	233
Annex 31. List of Completed Research Projects in 2024-2025 of ETM Unit.	240
Annex 32. List of Completed Research Projects in 2024-2025 of FTN Unit.	242

Annex 33. List of Completed Research Projects in 2024-2025 of MIT Unit.	247
Annex 34. List of Completed Research Projects in 2024-2025 of MSS Unit.	248
Annex 35. List of Completed Research Projects in 2024-2025 of WAE Unit.	250
Annex 36. Research Proposal in 2024-2025 of ETM Unit.	256
Annex 37. Research Proposal in 2024-2025 of FTN Unit.	257
Annex 38. Research Proposal in 2024-2025 of MIT Unit.	259
Annex 39. Research Proposal in 2024-2025 of MSS Unit.....	261
Annex 40. Research Proposal in 2024-2025 of WAE Unit.	263
Annex 41. List of index publication from ETM Research Unit for the last 5 year.....	267
Annex 42. List of publication from FTN Research Unit.	277
Annex 43. List of publication for the last 5 years from MIT Research Unit.	289
Annex 44. List of publication for the last 5 years from MSS Research Unit.	299
Annex 45. List of publication from WAE Research Unit.....	307
Annex 46. List of publications in Techno-Science Research Journal in Volume 12.....	321
Annex 47. List of Foreign Students at ITC.	323
Annex 48. Organizing Seminars and Workshops for Lecturers and Students.....	327
Annex 49. Joining Seminars and Workshops Organized by External Entities.	330
Annex 50. Industry Visit to ITC.	332
Annex 51. ITC Lecturers and Students Visit to Industries.	339
Annex 52. Projects, Training and Consulting Services for Private Sectors.....	341
Annex 53. Memoranda of Understanding and Memoranda of Agreement with Industry.	343

Agenda of CA 2025

26 June 2025

8h30 to 12h00 : Room A-110 at ITC

- 1) Opening Remarks by the President of the Board of Trustees
- 2) Adoption of Agenda
- 3) Presentation of Report of Director 2024-2025
- 4) Presentation of General and Pedagogical Documents for 2025-2026
- 5) Financial Report: Status in 2024-2025 and Estimated budget for 2025-2026
- 6) Nomination of Direction Team for 2025-2026
- 7) Q&A

Members of CA 2025

Membres de droit

1. S. E. Mme PHOEURNNG Sackona, Présidente du conseil d'administration et ministre de la culture et des beaux-arts
2. S. E. M. PELLET Jacques, Ambassadeur de France au Cambodge
3. S. E. M. UENO Atsushi, Ambassadeur du Japon au Cambodge
4. S. E. M. OM Romny, Secrétaire d'État au ministère de l'éducation, de la jeunesse et des sports
5. S. E. Mme PEN Chhorda, Secrétaire d'État du ministère des mines et de l'énergie
6. S. E. M. CHOU Kimleng, Secrétaire d'État du ministère de l'économie et des finances
7. S. E. M. PO Kimtho, Directeur de l'ITC
8. M. MAINETTI Nicolas, Directeur de l'AUF Asie-Pacifique
9. M. LAY Méng Sun, Directeur de la SKD et représentant du secteur privé
10. M. DEBASTE Frédéric, Représentant de l'ARES et des universités francophones de Belgique

Membres invités

11. M. PROTIN Ludovic, Directeur honoraire de l'ITC
12. M. VINCENT Pierre, Conseiller de Coopération et d'action culturelle de l'Ambassade de France et directeur de l'Institut Français du Cambodge
13. Mme TRAN Thy Anh-Dao, Attachée de coopération universitaire et scientifique, Ambassade de France au Cambodge
14. Mr. Kazumasa Sanui, Chief Representative of JICA Cambodia Office
15. M. KOICHIRO Watanabe, Senior Advisor of JICA
16. M. JUN-ICHI Takada, Executive Vice-President for global affairs at Institute of Science Tokyo (Science Tokyo)
17. M. Luc LE CALVEZ, Country Representative of IRD and Representative of Consortium
18. M. MAUSSION Pascal, Vice-président des Relations Internationales INP-Toulouse
19. M. IM Kravong, Représentant – AUF Cambodge
20. M. THOEUN Vongdy, Program Officer, JICA Cambodia Office
21. Mrs. SASAKI Chikako, Industrial Linkage/Project Coordinator JICA/ INACON Project

Direction de l'ITC et ses coéquipiers

22. M. SOY Ty, Directeur adjoint de l'ITC
23. M. BUN Kim Ngun (Assoc. Prof. Dr.), Directeur adjoint
24. M. NGUON Kollika (Asst. Prof. Dr.), Directeur adjoint
25. M. BUN Long (Assoc. Prof. Dr.), Directeur adjoint
26. M. CHUNHIENG Thavarith (Dr.), Conseiller chargé de la coopération et de la recherche
27. M. NUTH Sothân, Conseiller de l'ITC, Conseiller chargé de la pédagogie et des études
28. M. OR Chanmoly (Assoc. Prof. Dr.), Directeur du Centre de Recherche et d'Innovation (RIC)
29. M. SIM Tepmony (Assoc. Prof. Dr.), Directeur de l'école doctorale (GS)
30. M. LIN Mongkulsery (Assoc. Prof. Dr.), Directeur adjoint du Centre de Recherche et d'Innovation et Chef du département de Mathématiques Appliquées et Statistiques (AMS)
31. M. HAN Virak (Assoc. Prof. Dr.), Doyen de la faculté de génie civil (GCI)
32. M. CHHUON Kong (Asst. Prof. Dr.), Doyen de la faculté d'hydrologie et des ressources en eau (GRU)

33. M. CHRIN Phok (Dr.), Vice-doyen de la faculté de génie électrique et Chef du département de génie électrique et énergétique (GEE)
34. Mlle IN Sokneang (Assoc. Prof. Dr.), Doyenne de la faculté de génie chimique et alimentaire (GCA)
35. M. ENG Chandoeun (Assoc. Prof. Dr.), Doyen de la faculté de génie de géo-ressources et de géotechnique (GGG)
36. M. LAY Heng, Doyen de la faculté de génie électrique et chef de département de génie informatique et communication (GIC)
37. M. SRENG Sochenda (Asst. Prof. Dr.), Vice doyen de la faculté de génie électrique et chef du département de Génie de Télécommunications et Réseaux (GTR)
38. Mme SREY Malis, Chef du département de tronc commun (TC)
39. M. CHAN Sarin (Asst. Prof. Dr.), Vice-dean of Faculty of Electrical Engineering and Head of Industrial and Mechanical Engineering Department (GIM)
40. M. PHUN Veng Kheang (Assoc. Prof. Dr.), Chef du département Transports et Infrastructures (GTI)
41. M. HASH Chanly, Head Department of Architectural Engineering (GAR)
42. Mme YIN Molika (Asst. Prof. Dr.), Head of University-Industry Linkage (UIL)
43. Mme KHEM TranKrasel, Coordinatrice de la Section de français
44. M. SO Phea, Head of English Section
45. M. SOK Kimheng, Head of the STEM Library
46. M. SRANG Sarot (Asst. Prof. Dr.), Head of ECAM Engineering Program at ITC and Head of Dynamics and Control Laboratory (DCLab)
47. M. KHIEV Samnang, Responsable du service informatique (IT)
48. M. CHEA Samneang, International Program Coordinator
49. M. SIEANG Phen, Head of International Relations Office (IRO)

1. Summary of activities

– Current state

In 2024-2025, a number of remarkable events have been organized in close cooperation with national and international stakeholders.

Moreover, different meetings of ITC councils have been taken place online as follows:

- International Consortium Meeting at ITC, 26-27 March 2025 (Annex 1).
- 32nd Board of Trustees Meeting, 27 June 2024 (Annex 2).
- Study Council and University Life meeting in 2024-2025 (Annex 4).

An overview of the CA decision in 2024 and Consortium 2025 opinions is presented in table below.

No	Relevé de Décision du CA 2024	2024-25
1	Valorisation de la transversalité des cours entre les départements	Réalisé
2	Création de: Master of Architectural Engineering (GS)	Réalisé
3	Création de : Artificial Intelligence Engineering and Cybersecurity (GIC-International Program)	Réalisé
4	Création de: IT Network and Programming (GIC-Associate)	Réalisé
5	Création de : Industrial Engineering (GIM-Associate)	Réalisé
6	Création de : Geotechnical Engineering (GGG-Associate)	Réalisé
7	Changement du nom: Materials Science and Structure” to “Materials and Built Environment” (RIC)	Le même nom “MSS”
8	New PathWay of ECAM LaSalle “Second years of International Program can go directly to 3rd year at ECAM LaSalle” (ITC-ECAM-Kasetsart University)	Réalisé

No	Avis du Consortium 2025	Département	AVIS
1	New course for 3 rd Year semester 1 (C:16 ; TD:0 ;TP:0) Mastering skills by using IA Tool	GEE	Favorable
2	Combine Analog Filter with Analog Electronics for 3 rd Year semester 1 (C:32 ; TD:16 ;TP:16) Fundamental of Electronics	GEE	Favorable
3	Energy Conversion Move to 4 th Year Semester II (C:32 ; TD:16 ; TP:32)	GEE	Favorable
4	Power System Analysis and Optimization Move to 4 th Year Semester I (C:32 ; TD:16 ; TP:32)	GEE	Favorable
5	Data Science : Modify 7 courses in total, in which 4 courses modified names, 1 course is moved to semester 2, 1 course is modified the duration, and 1 course is a new course.	AMS	Favorable
6	Financial Engineering : All courses in year 3 are the same name in Data Science program. Some courses in year 4 and year 5 are the same name in Data Science program.	AMS	Favorable
7	Traffic Management and Modeling will be replaced by Traffic Engineering, Management and Simulation (I3-S2)	GTI	Favorable
8	Transport Systems of Freights and Traveler will be replaced by Transport Modeling and Planning (I3-S2)	GTI	Favorable

1.1. Remarkable events at ITC in 2024-2025

1.1.1. Launching the Cambodian Cyber University Network (CCUN)

Launch of the Cambodian Cyber University Network (CCUN): A New Era for Digital Education in Cambodia

On June 25, 2024, the Cambodian Cyber University Network (CCUN) officially launched, the result of the significant efforts of the Royal Government of Cambodia and the Ministry of Education, Youth and Sports.

A network of 12 higher education institutions. The CCUN brings together 12 leading academic institutions, united by a common mission: to revolutionize distance learning through digital technologies and ICT:

1. Institute of Technology of Cambodia
2. Royal University of Phnom Penh
3. Svay Rieng University
4. Heng Samrin University, Tboung Khmum
5. Royal University of Agriculture
6. National University of Battambang
7. Battambang Institute of Education
8. Angkor University
9. International University of Phnom Penh
10. National University of Management
11. Chea Sim Kamchay Mer National University
12. University of Kratie

By the end of 2024, members of CCUN increased to 18 universities.



1.1.2. The 60th Anniversary Celebration of ITC

The 60th anniversary of the establishment of the Institute of Technology of Cambodia (ITC) was celebrated on September 27, 2024, under the chairmanship of His Excellency Dr. Hang Chuon Naron, Deputy Prime Minister and Minister of National Education, Youth, and Sports.



Several distinguished figures were present on this occasion, including His Excellency Jacques Pellet, Ambassador of the French Republic to Cambodia, His Excellency Anatoly Borovik, Ambassador of the Russian Federation to Cambodia, and Mr. Nagase Kensuke, representative of

the Embassy of Japan. Numerous representatives of international organizations such as AUF, JICA, IRD, CIRAD, AfDB, and the World Bank, as well as ITC faculty, staff, and students, also took part in this event, bringing together a total of over 1,000 participants.

His Excellency Prof. Dr. PO Kimtho, Director of ITC, emphasized that the institute currently has 478 managers, civil servants, professors, and staff, including 148 women. He also highlighted the significant increase in the number of doctoral professors, from 48 in 2014 to 107 in 2024. This increase aims to strengthen teaching and, above all, research in order to address Cambodia's current challenges and maintain the Institute's competitiveness. He also emphasized the central role of research and the importance of knowledge transfer to society.

His Excellency Dr. Hang Chuon Naron emphasized that, for nearly a year, the new Prime Minister of Cambodia has continued to lead the nation by ensuring peace, prosperity, and the smooth running of public and private institutions, while benefiting from the support of friendly countries and international organizations. He took this opportunity to express his gratitude to the embassies of France, Belgium, and Japan, as well as to development partners such as JICA, AUF, the World Bank, the Asian Development Bank (ADB), IRD, and other organizations. Their continued commitment contributes to promoting the education sector and improving the quality of training and research in higher education, particularly through strengthening human resources and developing ITC infrastructure.

1.1.3. The 3rd International Conference on Earth Resources and Geo-Environment Technology 2024 (EraGET2024)

The International Conference on Earth and Geo-Environment Technology (EraGET) is an annual event initiated by the Faculty of Geo-resources and Geotechnical Engineering at ITC since 2022. EraGET aims to enhance educational opportunities, strengthen research capabilities among young geoscientists, promote the sharing of recent research trends, and expand collaborative networks involving researchers, industries, communities, and international institutions.

The 3rd EraGET took place on 12-13 December 2024, attracting approximately 500 participants, including professors, researchers, students, engineers, ministry officials, and industry representatives from Cambodia, Japan, China, India, Thailand, Malaysia, Indonesia, the Philippines, France, and Bangladesh. The conference accepted 72 research papers for presentation, highlighting significant advancements in geoscience and engineering under the theme “Innovation in Geoscience and Engineering: Cultivating Human Capital for Sustainable Growth.” This edition was jointly organized with the IGCP-700 project of Mahasarakham University, Thailand.

Additionally, a post-conference field trip was organized on 14-15 December 2024, taking approximately 100 participants to explore a candidate geopark area in Siem Reap province. This

field excursion provided participants with hands-on experience and deeper insights into geoscience practices and geo-environmental management.



1.1.4. Life Mechatronics Symposium

The International Symposium on Life Mechatronics 2024 (LMS2024) was held from December 26 to 28, 2024, at ITC (<https://lifemechatronics.com/lms2024/index.html>). The symposium aimed to promote international and cultural exchange, fostering friendship, research collaboration, and educational development among participants through research presentations.

The theme of LMS2024 was "Smart Agriculture and STEAM Education," with STEAM representing Science, Technology, Engineering, Art, and Mathematics. The symposium covered a broad range of topics, including smart agriculture, STEM education, media art, entertainment, sensing, optics and imaging, digital transformation, knowledge platforms, digital twin, computational modeling, simulation, AI, data science, pattern recognition, social design, environment design, recycling, food security, protein crisis, nutrition science, telecommunication, networking, and visualization.

The symposium attracted a diverse group of participants, including researchers, educators, and industry professionals from various countries. The agenda featured a total of 13 oral presentations and 7 poster presentations, covering a wide array of topics within the symposium's scope.

LMS2024 was organized by the Committee of Life Mechatronics Symposium (LMS) and the Cooperative Research Committee on Life Mechatronics for Smart Agriculture, Perceptual Information on C-branch (CPI) in the Institute of Electrical Engineers of Japan (IEEJ). The event was co-organized by ITC and supported by the JICA project.

Overall, LMS2024 successfully facilitated the exchange of knowledge and ideas among professionals in the fields of smart agriculture and STEAM education, contributing to the advancement of life mechatronics technologies and their applications.



1.1.5. Construction of the Center of Research and Technology Transfer at another ITC campus

The Institute of Technology of Cambodia (ITC) has launched a new construction project to erect its third building on campus, located near the "Win-Win" monument.

On December 30, 2024, His Excellency Professor Dr. Po Kimtho presided over a religious ceremony, called "Krong Peali," marking the official opening of the construction site for this new building. This building will be entirely dedicated to research and technology transfer at ITC.

This initiative represents a major milestone in ITC's development, strengthening its research capabilities and aligning with the Royal Government of Cambodia's ten-year strategy. Construction is scheduled for completion by early March 2026.



1.1.6. Another Campus of ITC in Kep Province

On September 5, 2024, an ITC working team, led by His Excellency Prof. Dr. PO Kimtho, met and paid a courtesy visit to His Excellency SOM Piseth, Governor of the Board of Governors, and the provincial leaders of Kep. During this meeting, His Excellency the Director informed the participants of the support and trust extended by the Ministry of Education, Youth and Sports, which enabled ITC to open a new campus under the name "Institute of Technology of Cambodia, Mondul Techo Hun Sen Chamkar Doung." This campus benefits from existing infrastructure, including academic and administrative buildings, dormitories, and sports facilities, and is located in Kep province.



His Excellency the Director also provided an update on preparations for the launch of the academic program for the 2024-2025 academic year on this new campus. Initially, the ITC will focus on ensuring the quality of engineering education and training leading to a University Diploma of Technology (DUT) in several specialties, including electricity, construction, food chemistry, and electronics.

For his part, His Excellency the Governor of the province welcomed this initiative and expressed his joy at seeing the ITC, a higher education institution renowned for its training expertise, establish itself in Kep. He emphasized that this presence will be a major asset for the educational and economic development of the province.

For the academic year 2024-2025, 22 students (12 females) enrolled in the foundation year (TC) of the engineering degree programs, while 13 students (2 females) enrolled for the Electrical and Mechatronics technician program (GEE).

Beyond degree programs, the new campus has hosted additional activities. With support from AUF, training sessions on entrepreneurship and the use of ICT tools were provided to students. Furthermore, the IRD visited the campus to assess the feasibility of installing a new laboratory.



1.1.7. An Award for ITC Robot Team

On July 19, 2024, His Excellency Prof. Dr. PO Kimtho, Director of ITC, convened a meeting with the professors who supervised the robot preparation work of Teams 1 and 2. These teams participated in the competition on July 14, 2024, at the Elephant Hall, Morodok Techo Stadium, under the chairmanship of three ministers: His Excellency Heng Sour, Minister of Labor and Vocational Training; His Excellency HEM Vandy, Minister of Industry, Science, Technology and Innovation; and His Excellency Net Pheaktra, Minister of Information.

It is worth noting that ITC Robot Team 02 won first prize and will represent Cambodia at the regional competition in Vietnam in early August 2024. ITC Robot Team 01 received the Engineering Honor Award. As a token of encouragement, His Excellency the Director stated: "This success is not due to chance, but is the result of the hard work of teachers, administrators, and all students. Therefore, I would like to join you in congratulating and appreciating this victory."

He also emphasized that the collaboration between students in Electrical Engineering (GEE), Mechanical Engineering (GIM), and Computer Engineering (GIC) was a key element of this success.

Finally, he concluded by sending a message of support to the participants:
"Good luck in the competition in Vietnam!"



1.1.8. MOU Signing Ceremony with University of Central Missouri, USA



The Institute of Technology of Cambodia (ITC), represented by its Director H.E. Prof. Dr. P.O. Kimtho, and the University of Central Missouri (UCM), represented by its President, officially signed a Memorandum of Understanding (MoU) on March 11, 2025, at ITC's main campus in Phnom Penh. This ceremony marks the beginning of a partnership focused on

developing academic exchanges, articulation programs, joint research, and other collaborative initiatives.

This new cooperation aims to address:

- 1) Bachelor's and Master's Programs: ITC and UCM agree to explore and implement an articulation/double degree program in the form of a 2+2 program combining the fields of computer science, AI and cybersecurity, software engineering, and big data engineering.
- 2) Academic Exchange Programs: ITC and UCM will collaborate to offer short- and long-term student and faculty exchange opportunities, thus promoting greater international exposure and intercultural learning.
- 3) Collaborative Research and Discovery, Learning, and Teaching: The two institutions will collaborate on innovative research initiatives aimed at addressing industrial needs and global challenges.
- 4) Professional Development Initiatives: The institutions will jointly develop training programs and workshops aimed at enhancing professional skills in various sectors.

1.1.9. MOU Signing Ceremony with Macquarie University, Australia

The Institute of Technology of Cambodia (ITC) and Macquarie University in Sydney, Australia, formalized their partnership by signing a Memorandum of Understanding (MOU) during the Australia-Cambodia Education Forum, which was held on March 14, 2025, at the Sofitel Phnom Penh Phokeethra.



The MOU was signed by senior representatives of both institutions: H.E. Prof. Dr. P.O. Kimtho, Director of ITC, and Dr. Matthew Monkhouse, Director for Southeast Asia and Eurasia at Macquarie University. H.E. Dr. Hang Chuon Naron, Deputy Prime Minister and Minister of Education, Youth and Sports, and H.E. Derek Yip, Australian Ambassador to Cambodia, attended the signing.

Both parties are committed to strengthening academic collaboration, establishing an articulation program (2+2), promoting student exchanges and stimulating innovation through joint research initiatives between the two institutions.

1.1.10. Inauguration of Air Conditioner Training Center and MOU Signing Ceremony with Panasonic Company



On March 18, 2025, Panasonic and the Institute of Technology of Cambodia (ITC) signed a memorandum of understanding (MoU) and inaugurated the Panasonic Training Center, aimed at developing technological infrastructure and technical skills for young Cambodians. This equipment is crucial for students' hands-on and practical experience.

The ceremony was attended by Cambodian Deputy Prime Minister Dr. Hang Chuon Naron, who praised the initiative for its impact on the country's industrial and economic growth. Japanese Ambassador Atsushi Ueno also expressed his support, highlighting the key role of ITC graduates in strengthening economic relations between Japan and Cambodia.

Panasonic representative Hisakazu Maeda emphasized the importance of equipping students with practical skills adapted to technological advances. For his part, ITC Director Prof. Dr. PO Kimtho highlighted the sustainable partnership between industry and higher education, which is beneficial to the future of students and Cambodia's industrial development.



1.1.11. High-level World Bank visit to the Cambodia Institute of Technology



Phnom Penh, May 6, 2025 – ITC hosted a World Bank delegation led by Mr. Alberto Rodriguez, Director for Human Capital Development for the Asia-Pacific region. The visit, honored by the presence of H.E. Dr. Som Rotana, Secretary of State, aimed to assess the results of the HEIP 1 project and the prospects for HEIP 2.

H.E. Prof. Dr. PO Kimtho, Director General of ITC, and other Cambodian representatives expressed their deep gratitude for the World Bank's critical support in improving ITC's infrastructure, equipment, and training capacity. Mr. Rodriguez welcomed the progress and reaffirmed the Bank's commitment to supporting ITC in its next steps.



1.1.12. World Bank Study Visit to the Institute of Technology of Cambodia



Phnom Penh, May 16, 2025 – The Institute of Technology of Cambodia (ITC) hosted a delegation of 45 World Bank experts from the Asia-Pacific region. The visit, led by Mr. Lauri Pynnonen, Senior Education Specialist, aimed to observe the results of the HEIP 1 project and the prospects for HEIP 2.

H.E. Prof. Dr. PO Kimtho, Director General of ITC, highlighted the significant impact of the World Bank's support on the development of the institute's infrastructure, equipment, and human resources.

The delegation also visited laboratories and exhibitions created as part of the HEIP 1 project.



1.1.13. ITC, host institute for the research panel in Asia

The 2025 edition of the Regional Research Panel, dedicated to the theme “**Gouvernance et structuration de la recherche en Asie**”, was officially opened on June 6, 2025 at the Institute of Technology of Cambodia by H.E. Dr. Hang Chuon Naron, Deputy Prime Minister and Minister of Education, Youth and Sports.

Nearly 30 managers and representatives of AUF - Asia-Pacific member institutions from eight countries (Cambodia, China, South Korea, Indonesia, Laos, Malaysia, Thailand, Vietnam), as well as more than 200 international researchers, professors and students, took part in this event.



1.1.14. The 14th Scientific Day



On June 5 and 6, 2025, ITC held its 14th Scientific Day under the theme: " Leveraging R&D for Innovation and Growth" The event was chaired by H.E. Dr. HANG Choun Naron, Deputy Prime Minister and Minister of Education, Youth and Sport, and attracted approximately 2000 participants, including researchers, scientists, teachers, and students, as well as students of about 1500 from various high schools.

The success of this event was made possible through the support from the Ministry of Education, Youth and Sports, the French Embassy, the Japan International Cooperation Agency, and the Agence Universitaire de la Francophonie. Financial contributions came from several private sector entities, including: Branch of Panasonic Asia Pacific PTE. Ltd, TEM Trading Co., Ltd, The French National Research Institute for Sustainable Development, FTRIP-EU-UNIDO, AFD-EDC, Ly Hour SBI Insurance PCL, Grande Solid Co., Ltd. & DKK-TOA Corporation, Grande Solid Co. Ltd. & Kyoto Electronics Manufacturing Co. Ltd., Centre de Coopération Internationale En Recherche Agronomique pour le Développement, DENSO (Cambodia) Co., Ltd., Yonemori Construction Co. Ltd., Cambodian-Yazaki Electric Wire Co. Ltd, CapCEE, SNP-PT International Co., Ltd., and Dynamic Scientific Co., Ltd. This event came with internet supports of two companies: Today Internet and NC NeocomISP Limited.

This event highlighted the importance of growth in R&D, innovation and collaboration between academia, researcher, and industry to drive sustainable development.



1.1.15. Honda Y-E-S Award Program 2024



The HONDA Y-E-S AWARD PROGRAM is implementing in Vietnam, Burma, India, Bangladesh, Laos and Cambodia.

As one of the important ASEAN countries, Cambodia is expected to experience dramatic growth in the near future. Higher education institutions are still in the process of growing and training future leaders, especially in the field of science and technology. Human exchanges and trade with Japan keep growing day by day, and

expectations for expansion in these areas were high. This is why this program for Cambodia began in 2008. As for the establishments concerned, they are the Institute of Technology of Cambodia, the Royal University of Phnom Penh and the Royal University of Agriculture. This year, there are 4 Cambodian laureates, including one from ITC, two from RUA and another one from RUPP. The following table highlights this data.

Year	Name	Total Number	ITC
2024	Mr. LUN Sokharaboth (GCI)	4 (ITC/RUPP/RUA)	1
2023	Mr. LEY Satya (GCI) Mr. LENG Mengthong (GIM)	4 (ITC/RUPP/RUA)	2
2022	Ms. DET Mouykeang (GCA) Mr. VIRAK Alexander (GIM)	4 (ITC/RUPP)	2
2021	Ms. CHHUOR Sochan Vimul (GCA)	4 (ITC/RUPP)	1
2020	Mr. KEO Seiha (GCI) Ms. LAY Cheavita (GCA)	4 (ITC/RUPP)	2
2019	Mr. KONG Rathaseyhak (GCA) Mr. CHHENG Ilay (GCI)	4 (ITC/RUPP)	2
2018	Mr. SONG Vergenylundy (GEE)	4 (ITC/RUA/RUPP)	1
2017	Ms. NY Vourchnea (GCA)	4 (ITC/RUA/RUPP)	1
2016	Mr. KOUCH Keang Ang (GCI) Mr. THAI Sereyvuth (GCA)	4	2
2015	Ms. EA Somuynea (GAR) Ms. CHHIM Panchapor (GCA)	4	2
2014	Mr. KOUCH Henghok (GCI) Mr. PHON Bunheng (GAR)	4	2
2013	Mr. SRENG Mengkoing (GIM) Ms. SROY Sengly (GCA)	4	2
2012	Mr. RITH Monorom (GIM) Mr. KHY Kimleng (GCI)	4	2
2011	Ms. EK Pichmony (GCA) Mr. SAY Vortana (GIC) Mr. CHHOR Marady (GCI)	4	3
2010	Mr. CHEA Ratha (GRU) Ms. Rath Sovannsathya (GCI)	4	2
2009	Mr. Ngor Pengsieang (GIM) Mr. En Sovann (GIC)	4	2
2008	Ms. Kim Keosopanha (GCA) Ms. Khuysien Soveary (GCI)	4	2

1.1.16. Admission to Ecole Polytechnique

Since 2007-2008, Cambodian students of the ITC have been present among other foreign students in a highly reputed school in France and around the world, the École Polytechnique. It is indisputable that our students have the basic knowledge solid enough to be recruited by the very difficult competition of this school. The list below illustrates the names of students who are studying or have studied at our polytechnic in other major schools and their careers.

For this year, 11 students took part in this competition organized at Institut Français du Cambodge, of which 6 students succeeded. It should be noted that there are two students for the École Polytechnique.

The table below illustrates this data.

Year	Full Name	Sex	Degree	Workplace	Responsibility
2024-25	CHHOY Zurich	M	Étudiant		
	UTH Rathana	M	Étudiant		
2023-24	CHOUV You Y	F	Étudiant		
	SEN Sovatheakna	M	Étudiant		
	KHUN Sivluy	F	Étudiant		
2022-23	SENG Hok	M	Étudiant		
2021-22	MOK Yong	M	Étudiant		
2020-21	Covid-19 Pandemic				
2019-20	NORNG Vannvatthana	M	Étudiant		
	CHHOUT Laychiva	M	Étudiant		
2018-19	VENG Namchhoen	M	Étudiant		
2016-17	CHAO Kimhong	M	Ingénieur	Institut Polytechnique	Etudiant en Master
	SAMBATH Vibolroth	F	Ingénieur	Institut Polytechnique	Etudiant en Master
	THY Vathana	M	Ingénieur	Institut Polytechnique	Etudiant en Master
2015-16	EANG Chanpaya	M	Abandon		Ingénieur
	NOU Sithea	M	Master	Suisse	Ingénieur
2014-15	HEANG Kitiyavirayuth	M	Master	Ecole des Ponts ParisTech (Paris)	Etudiant Architecte
	KHUN Kimang	M	Master	INRIA (Grenoble)	Ingénieur Doctorant
	THAN Poseng	M	Master	Paris Partner (Paris)	Ingénieur Informaticien
2013-14	IEA Bunthan	M	Master	Ministère du Développement Durable (France)	Ingénieur Corps d'Etat
	DIN Ratanak	M	Master	Vinci Construction (Paris)	Ingénieur d'Etudes
2012-13	KHOUN Ladyya	M	PhD	Naval Group	Ingénieur-Chercheur
	SENG Sodarith	M	Master	Vinci Construction (Phnom Penh)	Ingénieur d'Etudes
2011-12	UCH Bunnarith	M	Master	Suez (Rennes et Phnom Penh)	Ingénieur de Projet
2010-11	IM Seyha	M	Master	Corsicasole (Paris)	Ingénieur, Chef de projet
	HUY Seav Er	M	Master	AFD (Phnom Penh)	Ingénieur, Chef de projet
	SE Dara	M	Master	Suez (Rennes et Phnom Penh)	Ingénieur, Chef de projet
2009-10	SVAY Angkeara	M	PhD	LBL International (Phnom Penh)	Directeur Technique (CTO)
	CHEY Sopheak	M	Ingénieur	TC (Cambodge)	Enseignant à temps partiels
2008-09	MUY Sokseiha	M	PhD	EPFL (Suisse)	Post-Doctorat
2007-08	MANG Chetra	M	PhD	IRT SystèmeX (Paris)	Ingénieur R&D Senior

2. Recruitment, Evolution of Number of Students and Others Activities

2.1. Recruitment in 2024-2025

Students of engineering program (both national and international programs) have been recruited through an entrance writing examination (on site) on mathematics, physic/chemistry and logic. Recruitment of technician program is based on documentation from high school.

2.1.1. Preparation of Entrance Exam

Some information campaigns to high school students had been done on site. ITC also receives many visits of high school students at the campus. Online campaign and social network had also been implemented.

Lecturers of ITC were requested to propose writing tests based on curriculum in high school. The Direction Board of ITC was responsible for the final selection of the best tests with confidentiality.

The date, the tests and all regulations of the exam in the 3 campuses (Phnom Penh, Tbong Khmum and Kep Provinces) are the same.

2.1.2. Registration to the exam

Registration to the entrance exam of Engineering Program took place from 28 October 2024 to 24 November 2024. Total number of candidates is 3756 in which 1310 females. Table below shows the number of candidates in all campuses.

	Phnom Penh		Intl. Programs		Tbong Khmum		Kep		Grand Total	
	Total 1	F	Total 2	F	Total 3	F	Total 4	F	Total	F
Candidate	3589	1250	94	25	41	22	32	13	3756	1310

The entrance examination was held at ITC-Phnom Penh, ITC-Tbong Khmum and ITC-Kep on 27 November 2024 under supervision of ITC's Direction Board. No fraud had been reported and the tests were conducted in a satisfactory and transparent manner.

Figure 1 shows that number of candidates is slightly lower than last year.

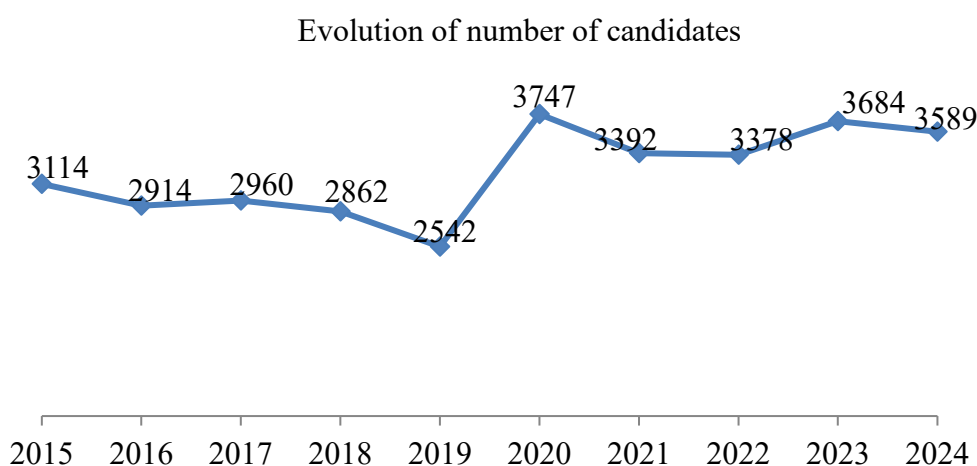


Figure 1. Number of Candidates registered in the entrance exam at ITC-Phnom Penh.

2.1.3. Result of the Entrance Exam

Result of the Entrance Exam was announced on 29 November 2024. There are 1502 successful candidates (487 Females) and 405 candidates in reserved list (140 Females).

Figure 2 shows that number of successful candidates remained around 800 from 2015 to 2016. Due to new building and equipment, number of successful candidates were increased every year from 1002 in 2017 to 1700 during Covid-19 period from 2020 to 2022 but slightly decreased to around 1500 in 2023 and 2024.

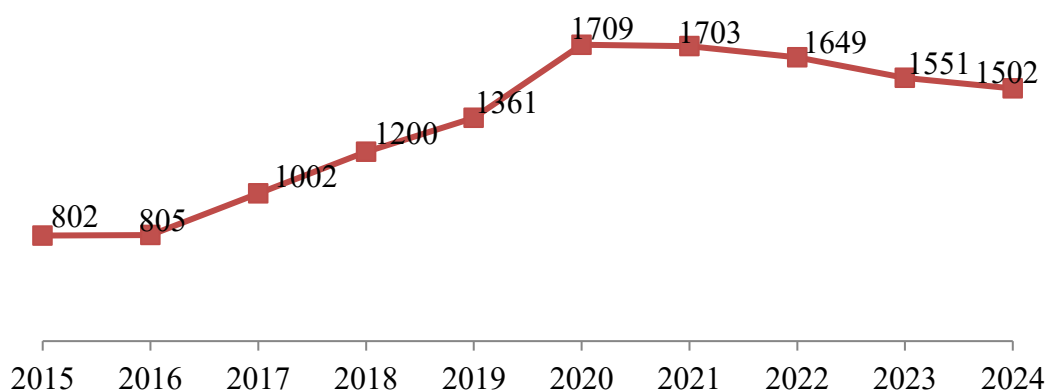


Figure 2. Evolution of number of successful candidates the last 10 years.

2.1.4. Enrollment in 1st Year

The academic year 2024-2025 of 1st Year students was commenced on 16 December 2024 which is about 2 months late comparing to others students who started their classes since 7 October 2024.

a) Engineering Program (ITC-Phnom Penh)

In total, 1408 students (458 females) have enrolled to 1st year of Engineering Program in the academic year 2024-2025.

b) International Engineering Program (ITC-Phnom Penh)

The International Engineering Program at ITC has launched from the academic year 2023-2024. Table 1 below presents number of high school graduates registered in the entrance examination, number of successful candidates and the one enrolled in the first year of international engineering programs.

Table 1. Number of students enrolled to 1st Year of International Program.

	Total	Female
Candidate	94	25
Successful candidates	60	17
Reserved list	7	1
Enrolled to I1	68 (26 students transferred from National Program)	14

c) Associate Degree Program (ITC-Phnom Penh)

For Associate Degree Program, 610 students (237 females) have enrolled in the first year in 2024-2025.

d) Engineering Program (ITC-Tbong Khmum)

Table 2 below presents number of high school graduates registered in the entrance examination, number of successful candidates and the one enrolled in the first year of engineering program at the second campus in Tbong Khmum Province. It is noted that all students enrolled in Tbong Khmum Campus are scholarship holders.

Table 2. Number of students enrolled to 1st Year at ITC-Tbong Khmum.

	Total	Female
Candidate	41	22
Successful candidates	30	16
Enrolled to I1	28	15

e) Engineering Program (ITC-Kep)

Following the recommendation of the Minister of Education, Youth and Sport, ITC sets up another campus in Kep Province which is located in the southwest of Cambodia and which about 160 kilometers from Phnom Penh. Table 3 below presents number of high school graduates registered in the entrance examination, number of successful candidates and the one enrolled in the first year of engineering program at ITC Kep Campus for the academic year 2024-2025. It is noted that all students enrolled in Kep Campus are scholarship holders.

Table 3. Number of students enrolled to 1st Year at ITC-Kep.

	Total	Female
Candidate	32	13
Successful candidates	21	12
Enrolled to I1	22	12

f) Associate Degree Program (ITC-Kep)

For Associate Degree Program, 13 students (2 females) have enrolled in the first year.

2.1.5. Remark and Conclusion

Due to its previous achievements, ITC gets trust from the Minister to expand its capacity to another campus in Kep Province. Maintaining the entrance examination is very important in order to keep a positive impression and a very strong brand in mind and appreciation of teachers, students, public and society. It is noted that expense of this examination was fully covered by the Ministry of Education, Youth and Sports, and ITC.

The direction board of ITC should continue to strengthen recruitment strategy of 1st year student of both engineering and technician program by sending staffs to high school in some provinces for advertising and distributing brochures to show the importance and benefit of studying of STEM (Science, Technology, Engineering and Mathematics), especially studying at ITC. The promotion activities can be also implemented online.

2.2. Pathway to 3rd Year Engineering Program

2.2.1. Pass from T2 to 3rd Year Engineering

The pathway is for Associate Degree graduates or equivalent degree. This year 2024-2025, 43 candidates applied for this pathway. Candidates have to pass the following criteria:

- Pre-select and Interview by relevant department,
- Join intensive class on mathematics and physic.

Table 4 below indicates number of candidates and successful candidates to 3rd Year distributed by department over the last five years.

Table 4. Number of technician graduates accepted to 3rd Year Engineering Program.

Dept.	Number of candidates and successful candidates to Year 3 (I3)									
	2020-2021		2021-2022		2022-2023		2023-2024		2024-2025	
	Candidate	Successful Candidate	Candi.	Succe. Candi.	Candi.	Succe. Candi.	Candi.	Succe. Candi.	Candi.	Succe. Candi.
GCA	27	10	27	15	13	9	13	13	11	11
GCI	16	9	12	10	6	2	12	11	13	11
GAR	-	-	-	2	-	-	-	1		2
GEE	4	1	6	3	2	2	2	2	14	14
GTR		1	-	3	-	-	-	-	4	4
GIM	7	5	2	2	3	2	1	1	0	0
GRU	-	-	-	-	-	-	-	-	1	1
GIC	1	1	-	-	-	-	-	-	-	-
Total	55	27	47	35	24	15	28	28	43	43

2.2.2. Entry into 3rd Year Engineering Program

Third year Engineering students may come from:

- Engineering students who finished successfully 2nd year of foundation year,
- DUT and technician graduates if they pass writing test and interview,

Table 5 shows actual number of 3rd year Engineering students.

Table 5. Actual number of 3rd year engineering students.

Department	I2 to I3	T2 to I3	Repeating students	Total
GCA	172	11	6	189
GCI	199	11	6	216
GAR	83	2	7	92
GEE	140	14	16	170
GGG	71	-	4	75
GIC	86	-	3	89
GIM	104	-	3	107
GRU	75	1	7	83
GTR	69	4	0	73
GTI	64	-	3	67
AMS	85	-	4	89
Total	1148	43	59	1250

2.3. Total number of students in 2024-2025

2.3.1. Total number of students in February 2025

As of February 2025, there are 7332 students (2585 females, 35.3%) in both Engineering and Technician programs (ITC-Phnom Penh) in academic year 2024-2025 shown in Table 6 below.

Table 6. Total number of students in 2024-2025 at ITC-Phnom Penh.

Dept.	T-1	T-2	Total 1	I-1	I-2	I-3	I-4	I-5	Total 2	Total 1+2
DTC				1408	1109				2517	2517
GCA	190	157	347			189	178	208	575	922
GCI	134	122	256			216	238	203	657	913
GAR	-	-	-			92	81	83	256	256
GEE	169	165	334			170	159	134	463	797
GGG	-	-	-			75	83	75	233	233
GIC	-	-	-			89	98	65	252	252
GIM	68	45	113			107	147	147	401	514
GRU	17	10	27			83	87	99	269	296
GTR	32	14	46			73	26	48	147	193
GTI	-	-	-			67	42	71	180	180
AMS	-	-	-			89	94	76	259	259
Total	610	513	1123	1408	1109	1250	1233	1209	6209	7332

Table 7 presents total number of students in 2024-2025 at ITC-Tbong Khmum Campus.

Table 7. Total number of students in 2024-2025 at ITC-Tbong Khmum.

Dept.	I1		I2		I3		I4		I5		Total	F
	Total	F	Total	F	Total	F	Total	F	Total	F		
DTC	28	15	27	13							55	28
GCA							10	10	11	7	21	17
GCI					14	5	11	0	16	5	41	10
Total	28	15	27	13	14	5	21	10	27	12	117	55

2.3.2. Reorientation

The reorientation represents number of students who quitted ITC due to some reasons such as:

- Recipient of scholarship to study abroad
- Changing of institution
- Dropping out since beginning of academic year
- Etc.

Table below summarizes number of reoriented students from 2nd to 5th Year. It is noted that 1st Year students do not finish their 1st semester yet. Therefore, number of reoriented students is not yet available at the time of reporting.

Table 8. Number of Reorientation of Engineering and Technician students.

	T-1	T-2	Total 1	I-1	I-2	I-3	I-4	I-5	Total 2	Total
Total	84	18	102	152	167	48	29	9	405	507

2.3.3. Total number of students in June 2025

After semester 1 of 2024-2025, number of reorientations is 507 students. Total number of students remains 6825 students. This number includes students of both Engineering and Associate Degree Program. Table below shows total number of students in June 2025.

Table 9. Total number of students in June 2025 (ITC-Phnom Penh).

Dept.	T-1	T-2	Total 1	I-1	I-2	I-3	I-4	I-5	Total 2	Total 1+2
DTC				1256	942				2198	2198
GCA	177	151	328			185	176	208	569	897
GCI	110	114	224			210	231	202	643	867
GAR	-	-				86	79	80	245	245
GEE	142	165	307			157	148	133	438	745
GGG	-	-				72	83	75	230	230
GIC	-	-				86	97	62	245	245

GIM	58	44	102			104	145	147	396	498
GRU	14	10	24			79	84	98	261	285
GTR	25	11	36			73	26	48	147	183
GTI	-	-				64	42	71	177	177
AMS	-	-				86	93	76	255	255
Total	526	495	1021	1256	942	1202	1204	1200	5804	6825

2.4. Final Exam (End of Semester)

This academic year 2024-2025, final exam during the 18th week of semester was organized onsite at ITC. The examination of some subjects has been made in advance because of special character (oral exam of language, projects...). The score is allocated according to the following scale:

- Attendance in class, TD and TP: 10%,
- Mid-term exam, project report, assignment, report of TP: 30-40%,
- Final exam: 50-60%.

It is noted that ITC management system has been developing under support of ARES-CCD project, Belgium. Score input is entered into this system by each lecturer.

2.5. Continuing Education

Continuing Education is designed for associate degree or equivalent degree holders who would like to continue their study in order to upgrade their degree to Bachelor Degree of Engineering.

This year, 230 new students (87 Females) have enrolled in this program. Among them, 68 students (61 Females) enrolled in GCA Department, 69 (10 Females) in GCI, 67 (10 Females) in GEE and 26 (6 Females) in GIM department.

Table 10 shows total number of students registered for the continuing education.

Table 10. Number of students enrolled in the Continuing Education Program.

Start	End	GCA		GCI		GEE		GIM			
		Total	F	Total	F	Total	F	Total	F	Total	F
2022	2025	46	35	37	5	48	10	12	6	143	56
2023	2026	32	30	46	8	43	12	19	5	140	55
2024	2027	57	53	80	14	54	16	20	4	211	87
2025	2028	68	61	69	10	67	10	26	6	230	87
Total		203	179	232	37	212	48	77	21	724	285

Figures 3, 4, 5 and 6 below show number of students enrolled and graduated in GCI, GEE GCA and GIM departments respectively.

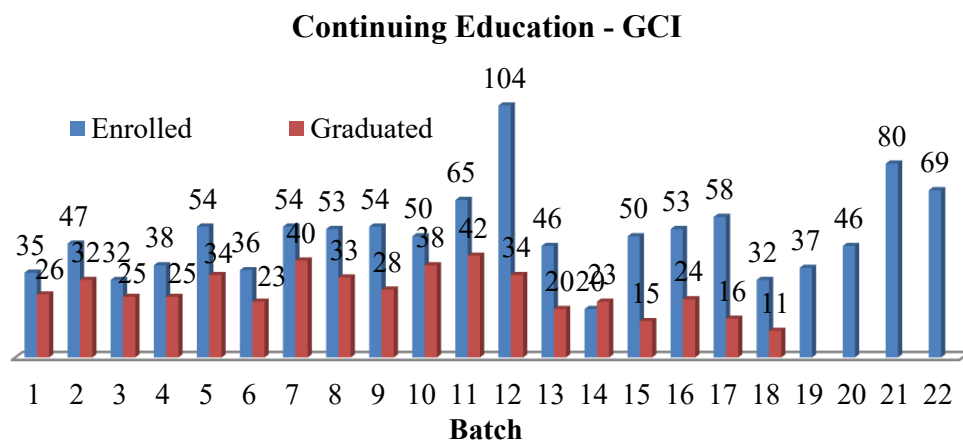


Figure 3. Number of students enrolled and graduated in continuing education (GCI).

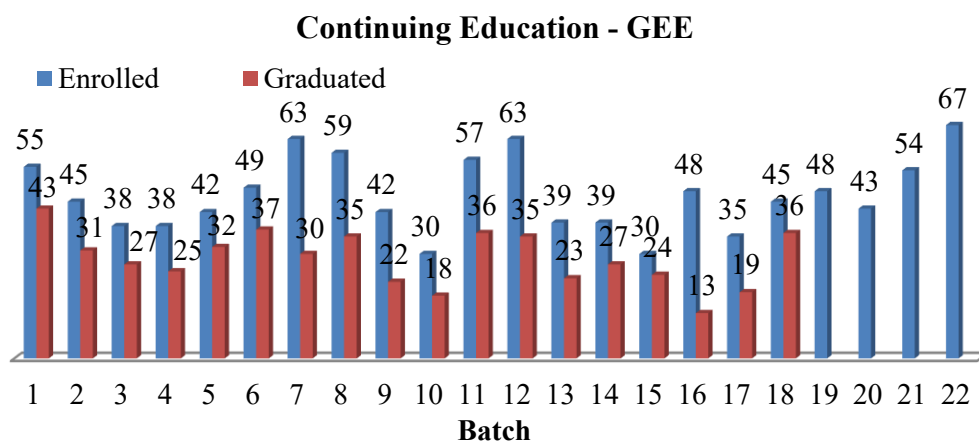


Figure 4. Number of students enrolled and graduated in continuing education (GEE).

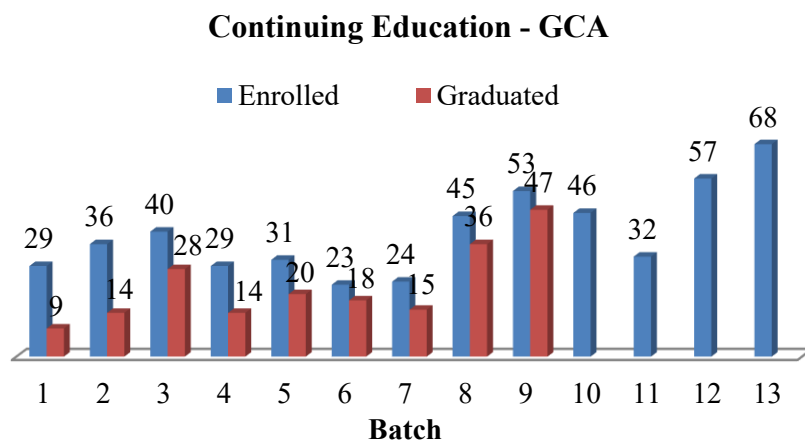


Figure 5. Number of students enrolled and graduated in continuing education (GCA).

Continuing Education - GIM

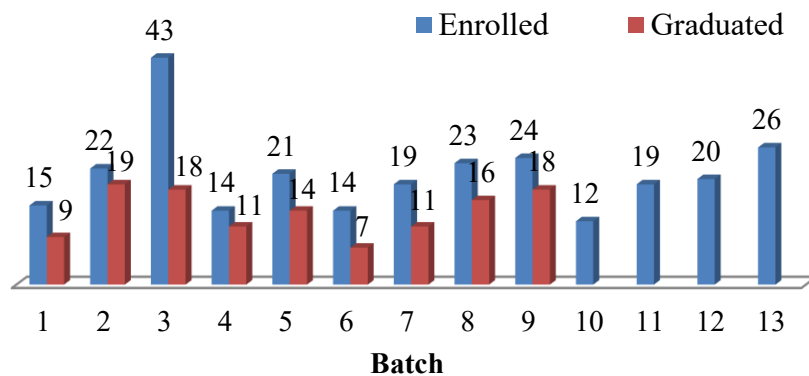


Figure 6. Number of students enrolled and graduated in continuing education (GIM).

2.6. Preparation of ITC students for exam of Grandes Ecoles in France

The cooperation between ITC and Ecole Polytechnique ParisTech was launched in 2007. It is mainly reflected by receiving at Department of Foundation Year long-term polytechnician trainees and organizing international exam of Ecole Polytechnique at ITC. A partnership agreement was signed between the two institutions.

An intensive session of preparation for Institut Polytechnique de Paris (IP Paris) was set up from 14 to 19 October 2024 for 11 eligible ITC students. This preparation has involved two French professors of preparatory classes of Grandes Ecoles (Olivier GRANIER and Philippe BARLIER).

The exam was conducted at Institut Francais du Cambodge from 4 to 9 November 2024 by an International Committee of Institut Polytechnique de Paris. Finally, six candidates have been accepted. Two of them will study at Ecole Polytechnique and Four at École nationale supérieure d'informatique pour l'industrie et l'entreprise (ENSIIE).

Since academic year 2007-2008, 68 ITC students integrated in one of the Grande Ecole in France:

- 30 at Ecole Polytechnique,
- 4 at Ecole Supérieure de Physique et de Chimie Industrielles (ESPCI),
- 3 at Ecole Nationale Supérieure des Techniques Avancées (ENSTA),
- 22 at Ecole Nationale Supérieure d'Informatique pour l'Industrie et l'Entreprise (ENSIIE),
- 1 at Ecole Nationale Supérieure des Mines d'Albi,
- 2 at Ecole Nationale Supérieure des Mines d'Alès,
- 2 at Ecole Telecom Sud Paris, and
- 4 at Ecole Nationale de la Statistique et de l'Administration Economique (ENSAE).

These students get systematically scholarships, usually Eiffel Scholarship from Government of France.

Figure 7 below shows number of ITC students integrated in an engineering school since beginning of cooperation.

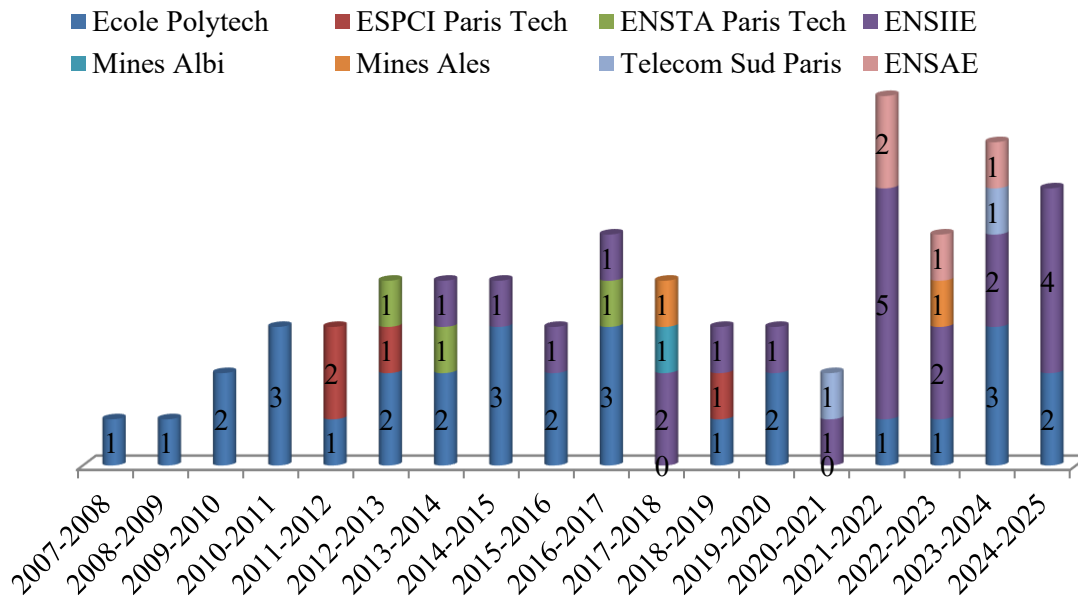


Figure 7. Number of ITC students integrated in an engineering school since 2007-2008.

2.7. Preparation for the exam of Japanese Government Scholarship

Table 11 shows the number of ITC students who pass successfully the exam of Japanese Government Scholarship. In 2024-2025, 8 students of ITC among 31 successful candidates won this Scholarship.

Table 11. Number of awardees of Japanese Government Scholarship 2024.

Year	Research		Undergraduate		College of Technology		Specialized Training College		Total (ITC)
	Total	ITC	Total	ITC	Total	ITC	Total	ITC	
2010-11	9	0	0	-	0	-	2	2	11 (2)
2011-12	11	0	2	1	8	8	7	1	28 (10)
2012-13	11	0	0	-	14	13	12	3	37 (16)
2013-14	11	0	1	0	16	15	9	3	37 (18)
2014-15	12	2	2	0	15	12	13	7	42 (21)
2015-16	12	2	1	1	6	3	7	3	26 (9)
2016-17	12	3	1	1	7	4	10	5	30 (13)
2017-18	12	1	2	1	5	4	3	3	22 (9)
2018-19	12	5	1	1	7	3	5	0	25 (9)
2019-20	10	5	0	0	11	8	8	4	29 (17)
2020-21	-	-	0	0	14	7	8	3	22 (10)
2021-22	12	1	1	1	14	11	9	5	36 (19)
2022-23	10	1	0	0	10	5	6	1	27 (7)

2023-24	11	1	1	0	12	6	10	4	34 (11)
2024-25	12	1	2	1	10	1	11	5	31 (8)

2.8. Scholarships and exemption of tuition fee in 2024-2025

Different funding sources were used to award scholarships to ITC students for encouraging the best students and also to help those whose families faced financial difficulty.

In 2024-2025, There are 3567 scholarships, which represents about 48% of the total number of Engineer and Technician students. It is noted that the estimated amount of a scholarship varies from 100 to 2600 USD per year and 100% of female students are scholarship holders (tuition fee's discount). The table below shows the different scholarships.

Table 12. Different Scholarships at ITC.

No.	Type of Scholarship	Number of students
1	Boursier M et P	634
2	Bourse partielle (Fille)	2082
3	Boursier (Premier Ministre)	18
4	Panasonic (Company)	4
5	Chip Mong Insee (Company)	10
6	Prince Bank (Company)	128
7	Enfant du Mekong (NGO)	33
8	Smart Axiata (Company)	2
9	Sumitomo (Company)	8
10	S4C Project (Government and ADB)	518
11	Lotte Foundation	20
12	Akaraka (NGO)	8
13	Techo Digital Talent (MPTC, Public Institution)	81
14	TEM (Company)	21
Total		3567

2.9. Activities Report of E-learning Center

2.9.1. Background

ASEAN Cyber University project was first proposed at the ASEAN – South Korea Summit in 2009. The project is expected to help establishing a foundation for sharing experiences, knowledge, and skills in higher education and long-distance education among ASEAN countries and South Korea. At the first stage, the project is designed to help the CLMV (Cambodia, Laos, Myanmar and Vietnam) countries acquire the technology and knowledge related to e-learning systems, to help students in remote areas access higher education.

In 2011, ITC was selected by the selection committee from Korea for setting up ASEAN Cyber University (ACU) and also mandated by the Ministry of Education, Youth and Sport (MoEYS) of Cambodia to implement the ACU Project. In the project, an e-learning center and multimedia studio had been installed in May 2012 with a content development room, an operation room and learning management system (LMS) servers to host the e-learning course contents. The e-learning center is directly connected to the ACU hub center in Vietnam to share online courses among CLMV countries using TEIN (Trans-Eurasia Information Network) high speed network connection.

From January 2020, the ASEAN Cyber University project finished. There is no support from ACU for course development and course operation. ITC has moved all the courses (including the courses of our partners) to our own LMS for course operating in ITC.

The mission of this center are the follows:

- Capacity building of staff and students for e-learning
- Increase access to higher education using ICT as the tool for learning, teaching, and sharing information
- Promote Cambodia life-long learning
- Promote the collaboration on e-learning in CLMV countries
- Advocate best practice, strategy and policy for e-learning

2.9.2. Cambodian Cyber University Network (CCUN)

In 2022, ITC supports the Directorate General of Higher Education of the Ministry of Education, Youth and Sport (DGHE/MoEYS) to prepare the concept note for the CCUN project. This project aims to improve higher education quality by using online and digital Teaching and Learning (T&L) materials. The project will connect the Higher Education Institutes (HEIs) in Cambodia through a common network infrastructure and LMS (Moodle). And through this common infrastructure and platform, Member Institutes (MIs) can share their digital content among each other's. The project will also promote the credit transfer among MIs and allow them to connect to global cyber universities network.

In the pilot phase of this project, in 2023, the CCUN involves six HEIs (ITC, RUPP, RUA, NUBB, SRU, UHST) as MIs. With the experience ITC gained from ACU project, ITC played a role as technical lead and support other five HEIs to development their e-learning activities.

On June 25th, 2024, CCUN was officially launched under the high presidency of Samdech Moha Borvor Thipadei Hun Manet, Prime Minister of the Kingdom of Cambodia, and His Excellency Dr. Hang Chuon Naron, Deputy Prime Minister and Minister of the Ministry of Education, Youth and Sport, with 12 member universities. By the end of 2024, CCUN has total 18 member universities joining the network.



From 2023, the activities of e-Learning Center of ITC are not only to promote the e-learning in ITC, but we put more focus to support all the CCUN's member to develop and implement their e-learning activities, while ITC handle also the CCUN's infrastructure and LMS.

In early 2024, to support the development of CCUN, the direction board of ITC decided to integrate ITC's LMS with CCUN. All the courses' materials (340+ courses from different programs (e-learning and non-learning) at ITC are moved to CCUN's platform.

2.9.3. Activities 2024-2025

Below paragraphs show a summary activities and result of CCUN implementation in 2024

- Increase capacity of CCUN infrastructure (at ITC) to support more or double users and learners. Four new additional servers (two for LMS, two for infrastructure) were added to the existing infrastructure.
- Organize 2 training on "e-Learning and Digital Content Development" with total 133 participants from 13 organizations.
- Organize 2 training on "Learning Management System (LMS) – Moodle Administration" with total 89 participants from 14 organizations.
- Organize 2 monitoring and support mission to 4 member universities on network campus design, monitoring and troubleshooting
- Organize 2 monitoring and support mission to 4 member universities on e-learning content development and operation. The main activities during the mission are 1) follow up progress and study about challenges, 2) support members to develop e-learning content, 3) provide support on LMS operation and studio operation as required.
- Convert 8 courses into e-learning materials
- Operate 5 courses developed in 2023: For academic year 2023-2024, there are total 680 enrollment (equal to 454 learners or individuals) to the 5 courses (in the program Computer Science, Engineering Degree).

Remark: one learner can take several online courses which count as enrollment. For example, if one learner takes two courses, then there are two enrollments (to two different courses) while there is one learner.

In 2024, ITC signed the MOU with Southern University of Science and Technology (People's Republic of China) and International Center for Higher Education Innovation under the auspices of UNESCO (UNESCO-ICHEI) to work together to promote online learning and CCUN's activities in the future.

In April 2025, CCUN member (18) organized a meeting to discuss and plan the activities for 2025. Below is the summary of the result of the meeting and discussion

- ITC organizes training on “e-Learning and Digital Content Development” and “Learning Management System (LMS) – Moodle Administration” for new members.
- ITC continues to provide the Monitoring and Support mission on “e-Learning Activities Development” and “Network Infrastructure Development” to members base on request.
- ITC in partnership with UNESCO-ICHEI and IIOE will organize a webinar on “Using AI to Support Teaching and Learning in HEIs” in June 2025.
- Each member defines the number of courses to develop this year
- DGHE/MoEYS will lead the discussion on courses sharing, credit transfer among CCUN member. The discussion will continue in 2025 and expect to implement in academic year 2025-2026.

2.9.4. E-learning Content

Below table summary the content that the e-learning center developed by December 2024.

E-learning content: 222		
57	Courses at ITC - 8 courses developed (4 new, 4 update) in 2024 under the CCUN (total 13 courses)	Some content are shared to partners
11	Courses for UNESCO-BEEP	Currently hosted and operated by DIT/MoEYS
3	Courses for partners	NUM, UHS, Ministry of Rural Development
77	Content for CIESF – IT Passport Examination Preparation Book	Video production Hosting with ITC
74	Math and Khmer contents grade 12 for MoEYS	Video production during COVID-19 pandemic

Besides the courses and content above, the e-learning center also host the content of our partner on <https://moodle.ccun.edu.kh>

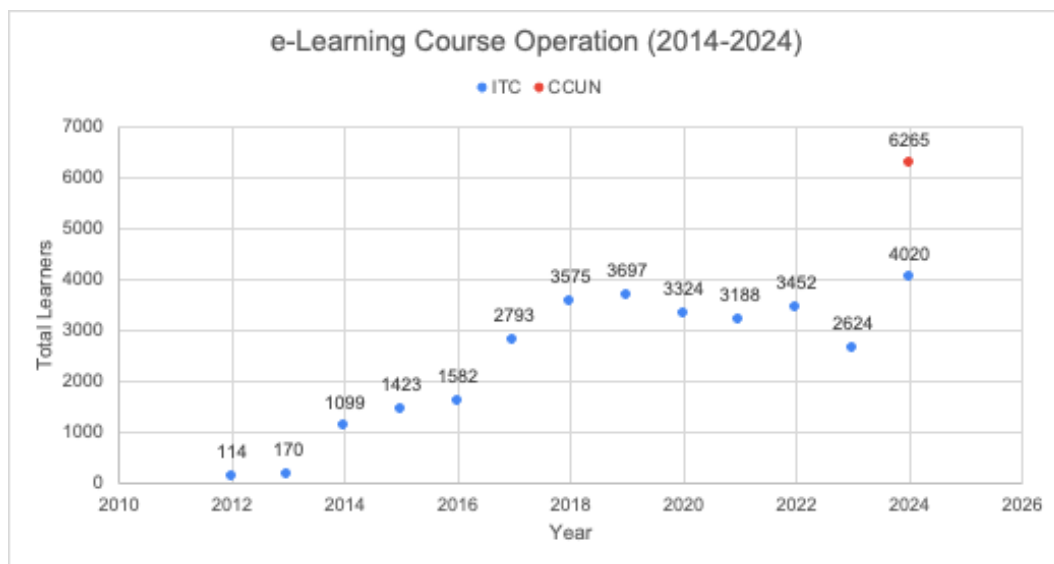
E-learning content		
92	Courses of CCUN, from six member universities: ITC (13), RUPP (12), RUA (29), NUBB (8), SRU (15), UHST (15)	Hosting on CCUN's LMS platform
13	Courses integration of CIRAD (RUA)	Agroecology content
4	Contents of AUF	Moodle training

2.9.5. E-learning Content operation

In early 2024, to support the development of CCUN, the direction board of ITC decided to integrate ITC's LMS with CCUN. All the courses' materials (e-learning and non-learning) at ITC are moved to CCUN's platform. With this integration, in academic year 2023-2024, there are 340+ courses

from different programs at ITC were operated on CCUN's platform, in which there are 50+ e-learning courses (developed in different projects/programs) spread over 8 different programs. And there are 5000+ learners and 300+ teachers at ITC using CCUN's platform to support their teaching and learning.

Below figure illustrate the e-learning courses operation in ITC from 2014 to 2024 plus the e-learning courses operation on CCUN's platform by all member (including ITC) in academic year 2023-2024.



2.10. Activities of library of ITC

1. Introduction

The STEM Library, inaugurated in 2017 to a new building I at the Institute of Technology of Cambodia, is a brand-new facility designed to support academic and research activities in the fields of Science, Technology, Engineering, and Mathematics (STEM). The library is managed by a dedicated team of six librarians and houses an extensive collection of **13,000 books, 2,000 theses, 110 printed journal, may open educational resources and open access database**. It offers a variety of spaces to cater to diverse user needs, including **10 discussion rooms, 1 meeting room, 1 self-study room, and 3 startup rooms** for innovative projects and collaborative work. Since its establishment, the STEM Library has become a central hub for learning, research, and innovation, providing students, faculty, and researchers with the resources and environment necessary for academic success.

2. Access and Registration

The STEM Library is a popular destination for students, with an average of **200 students** visiting daily and **31000 yearly**. These students utilize the library for a variety of purposes, including **reading, completing assignments, self-study, and conducting research using the internet**. To ensure smooth access, the library has implemented an efficient registration system that allows users to create accounts and access resources seamlessly. At the beginning of each academic year, **new student orientations** are conducted to familiarize users with the library's facilities, services, and policies. These orientations have proven effective in helping users navigate the library's resources and spaces.

3. Circulation

The circulation desk is one of the busiest sections of the library. The library uses an **automated circulation system** to manage loans, returns, and overdue items, which has significantly improved efficiency and reduced errors. The most frequently borrowed items include **textbooks** and **theses**. The circulation service is very flexible to student need, for example if students are doing internship at a very far area, we allow students to borrow book with a very long duration by discussing with librarian.

4. Catalog

The library is currently in the process of transitioning from the **PMB library management system** to **Koha library management system**, an open-source system widely used by other university libraries. This transition is expected to be completed within the year and aims to improve catalog management, enhance user experience, and ensure compatibility with other institutions. Koha offers advanced features such as a **user-friendly interface**, **customizable search options**, and **integration with digital resources**. The new system will also allow users to access the catalog remotely, making it easier to search for and reserve materials. Training sessions for staff and users will be conducted to ensure a smooth transition.

5. Reference Service

The reference service is a critical component of the library's offerings, providing users with assistance in locating resources, conducting research, and using digital tools. In the past year, the reference team handled **many inquiries**, ranging from simple book searches to complex research assistance. While the service has been helpful, there is a need for improvement through **staff capacity building**. Plans are underway to organize **training sessions** and **workshops** focused on enhancing skills in research assistance, digital resource management, and user support. These initiatives will ensure that the reference team is equipped to meet the evolving needs of users.

6. Symposium Room Usage

The symposium room is one of the most frequently used spaces in the library, operating at **full capacity** throughout the year. Within the **last 6 months** there are **1365 teams** book the room. It serves as a venue for **student discussions**, **teamwork**, **projects**, and **presentations**. Equipped with **smart TV and WiFi**, the room has become a preferred space for collaborative activities and academic events. The library plans to continue promoting the use of this space for academic and creative endeavors.

7. Partnership and Collaboration

The STEM Library has established **partnerships** with other university libraries to facilitate **webinars**, **training sessions**, **knowledge exchange**, and **mutual support**. These collaborations have enriched the library's resources and provided users with access to a broader range of materials and expertise. For example, the library has joint initiatives such as **webinars on digital literacy** and **workshops on research methodologies** have been organized to benefit users and staff alike. These partnerships have strengthened the library's role as a center for academic excellence.

8. Capacity Building

To enhance the quality of services, library staff have participated in **seminars, workshops, and capacity-building programs** in Thailand. These initiatives have focused on improving skills in **reference services, digital resource management, and user engagement**.

9. Build culture of open access

STEM library together with TSRJ Techno Science Research Journal has conducted a seminar on how to publish in open access platform and invite senior research from ITC and RUPP to share the experience and best practice to our master students, lecturers and researchers.

10. Preparation for Institutional repository

Under the ARES Project we have opportunity to visit university's library in Belgium such as Université Catholique de Louvain (UCLouvain), Université de Liège (ULiège), Université de Namur (UNamur), Université Libre de Bruxelles (ULB), and University of Ghent (UGent). The visited universities maintain robust institutional repositories, each tailored to support research, education, and dissemination while adhering to open access (OA) principles, legal obligations, and institutional policies. These libraries serve as digital hubs for storing, preserving, and sharing academic resources, ranging from research articles and theses to digital collections and multimedia.

- **Common Purpose:** All libraries aim to enhance visibility, accessibility, and preservation of scholarly output while supporting researchers, students, and external stakeholders.
- **Geographical Context:** Located in Belgium, these institutions operate within a regulatory framework that encourages open science, compliance with national and European laws, and collaboration with international networks

11. AI integration

The integration of Artificial Intelligence (AI) into library services represents a transformative opportunity to enhance user experience, streamline operations, and support academic and research activities. As the STEM Library looks to the future, adopting AI technologies will be a key focus to modernize services and maintain its position as a cutting-edge academic resource. STEM Library has created many AI tutorial videos and also share many useful AI tools such as ChatGPT, Gemini, Deep Seek, SciSpace, Research Rabbit, Elicit, Paper Digest and many others tools for students, teachers, and researchers to support them in learning, teaching and research as well.

STEM Library start to explore the AI-powered recommendation system by using Machine Learning model with AI new capability to learn from the patron behaviors and suggest personalize resources to them.

STEM Library also start to build more strong connection with international library by joining the Library XIX CONSAL conference in Malaysia to collaborate with the library from the 10 ASEAN countries to explore future opportunity to support teaching learning and research.

3. Educational Report

3.1. Overview of teaching/research staffs at ITC

3.1.1. Number of lecturers/researchers

In 2024-2025, ITC has 389 (106 females) full-time, trainee and part-time lecturers, lecturer-researchers and full-time researchers. Table 11 below shows the number of lecturers in different departments. Among these 389 lecturers, there are 121 PhD (31.1%), 224 Masters (57.6%) and 44 other degrees (11.3%). They give lectures and also participate in research project, as well as other administrative tasks.

Table 13. Number of lecturers/researchers in different departments in 2024-2025.

Degree		GCA	GCI	GAR	GEE	GGG	GIC	GIM	GRU	GTR	GTI	MAS	DTC	SF	SA	Total
PhD	Full-time	14	15	0	7	10	1	8	13	5	1	3	0	0	0	77
	Trainee	6	5	2	1	4	0	1	6	1	1	1	0	0	0	28
	Part-time	3	3	0	0	0	0	0	4	0	2	3	0	0	1	16
Sub-Total 1		23	23	2	8	14	1	9	23	6	4	7	0	0	1	121
Msc.	Full-time	3	3	0	6	2	9	14	6	4	1	5	9	5	2	69
	Trainee	20	3	4	17	4	8	11	9	3	1	1	0	0	0	81
	Part-time	3	5	8	1	1	2	2	4	1	6	13	9	9	10	74
Sub-Total 2		26	11	12	24	7	19	27	19	8	8	19	18	14	12	224
Bsc.	Full-time	0	0	0	0	0	0	0	0	0	0	0	3	4	0	7
	Trainee	0	0	0	0	0	6	1	0	0	0	0	0	0	0	7
	Part-time	0	0	5	1	0	0	0	2	0	0	0	1	15	6	30
Sub-Total 3		0	0	5	1	0	6	1	2	0	0	0	4	19	6	44
Total		49	34	19	33	21	26	37	44	14	12	26	22	33	19	389

Number of lecturers/researchers increases slightly each year. The evolution of number of lecturers/researchers in the last 10 years is shown in Figure 8.

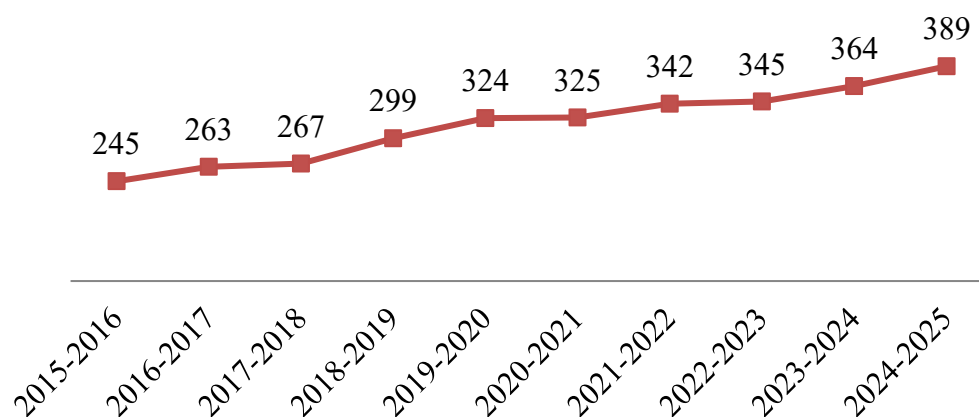


Figure 8. Evolution of Number of Lecturers/Researchers.

Evolution of number of lecturers/researchers with PhD and Master Degree is shown on Figure below. Through regional and international cooperation, number of PhD holders increases about 2.5 times over the past 10 years, from 50 in 2015-2016 to 121 in 2024-2025. Number of Master holders also increases from 118 in 2015-2016 to 224 in 2024-2025. They are potential human resources for teaching and research at ITC.

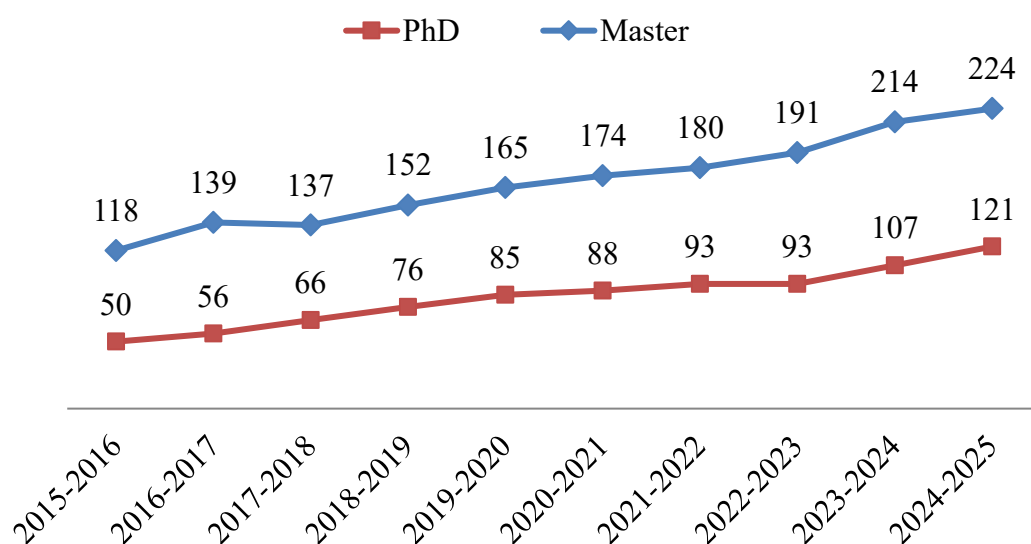


Figure 9. Evolution of number of PhD and Master holders.

3.1.2. Lecturers/researchers graduated from different countries

Lecturers/Researchers of ITC were graduated from different countries and regions in the world:

- At local level in Cambodia (37.5%) in which most of them are lecturers in Department of Foundation Year, English and French Sections.
- At regional level (19.3%) in 5 ASEAN countries: Thailand, Indonesia, Philippines, Malaysia, and Vietnam.
- At international level (43.2%) in 13 countries: France, Japan, Belgium, South Korea, Russia, Australia, China, Canada, USA, India, Mexico, Netherlands, New Zealand and Spain.

Figure 10 below indicates percentage by country that ITC lecturers/researchers were graduated from. Abroad, ITC lecturers/researchers graduated from France the most, followed by Japan, Thailand, Indonesia and Belgium.

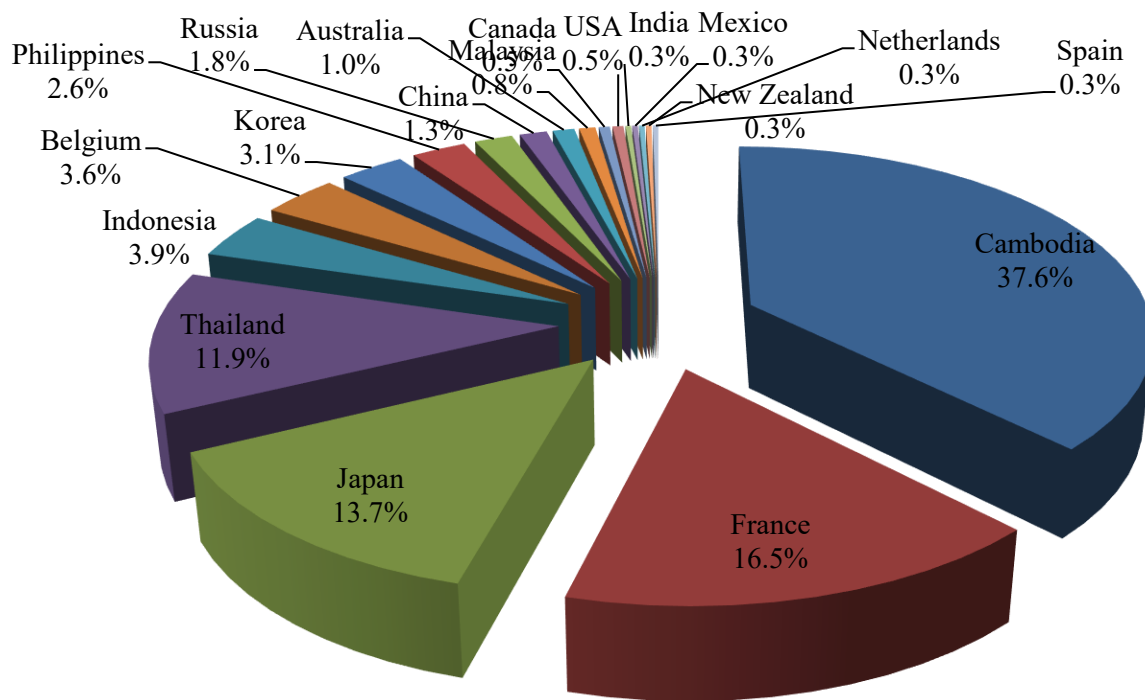


Figure 10. ITC lecturers/researchers graduated from different countries.

3.1.3. Conclusion

Human resources of ITC have increased in recent years with PhD's Degree holders. This year, number of PhD (121) is higher than last year (107), also number of PhD with civil servant status in 2024-2025 (77) is slightly increased comparing to last year (72).

With strong collaboration with partners and through some projects, young lecturers and students have been sent to partner universities abroad to continue their PhD's Degree abroad and will come back in the upcoming year. To ensure quality of teaching, research and also technology transfer, ITC needs to recruit and also maintain young Master and PhD holders who are dynamic for both academy and research.

3.2. Student Employability

An online survey on student employability was conducted in October and November 2024. 569 engineering students graduated in 2024 responded which is about 70% of total graduates (814). Result of this survey is shown graphically in Figure 11.

Figure 11 shows that 80% of engineers graduated in 2024 are employed; 13% are continuing their studies mostly in overseas; and 7% are waiting for result of scholarship or are seeking employment.

Among the employed graduates, 89% works with private sector, 8% with public sector and 3% with others sectors.

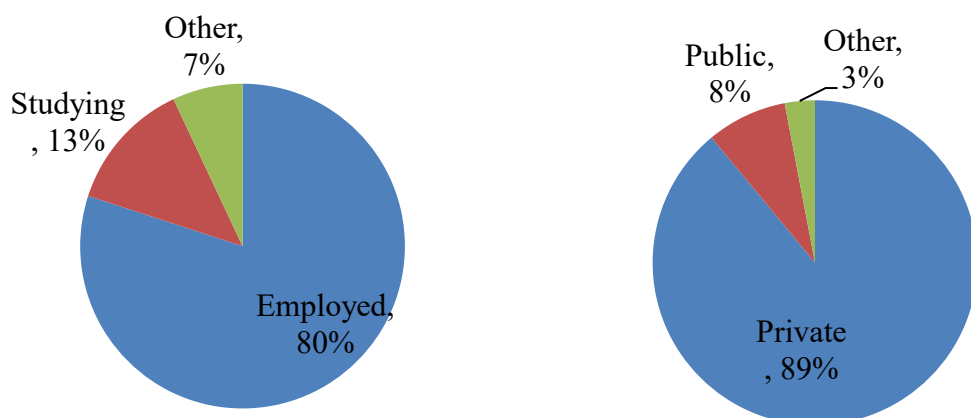


Figure 11. Engineering students graduated in 2023-2024.

Figure 12 shows that 89% of technicians graduated in 2024 are employed; 11% are continuing their studies.

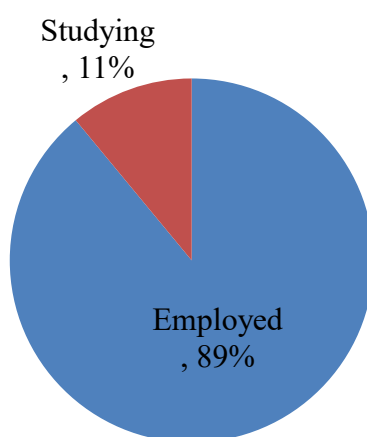


Figure 12. Technician students graduated in 2023-2024.

3.3. Graduate School of ITC

3.3.1. Introduction

Graduate School of the Institute of Technology of Cambodia (GS-ITC) plays an important role in supporting and providing services regarding the development of human resources at graduate (Master and Doctoral) levels at ITC. Its prime objective is to increase the number of highly qualified human resources in fields of Sciences, Engineering, Technology and Architecture, to meet the demands of Cambodian economic development and society.

Vision

Excellence in graduate education in STEM so that graduates have full potentials and skills to meet the requirement of the Cambodia's 2030 vision.

Mission

GS-ITC commits to achieving the long-term vision of ITC concerning graduate education by providing services to the campus community that maintain integrity and excellence in graduate education in STEM through clear and consistent policies, high standards, efficient procedures, and direct student support. We seek to support and serve as a resource for all graduate students, and to support faculty and staff by fostering relationships, increasing communications and collaborations, and delivering comprehensive research and data resources to inform about graduate education. The graduate school:

1. Improve and develop graduate training programs in STEM to align with national, regional, and international standards.
2. Educate graduate students to have full potentials and skills in STEM to meet the requirement of the Cambodia's 2030 vision.

Core Values

- Excellence in graduate education
- Recruitment and graduation of outstanding students
- Ethical conduct and integrity in graduate studies and research
- Diversity among students, faculty, and staff
- Communication and collaboration throughout the graduate community
- Accountability and transparency
- Graduate-student professional development
- Preservation of academic standards
- Maintaining accurate data and records.

Goals (2021-2030)

1. Improve and develop **10 graduate training programs** in STEM to align with national, regional, and international standards.
2. Educate **952 graduate students** to have full potentials and skills in STEM to meet the requirement of the Cambodia's 2030 vision.

3.3.2. Summary of Realized Activities in 2024-2025

No	Activities		Based line (2023-24)	Target (2024-25)	Realized (June 2025)	Plan 2025-26	Indicator
1	Increase number of partnerships	Academic institutions	21	21	21	23	Number
		Development agencies	4	4	4	4	Number
		Government/Private sectors/NGO	3	5	4	5	Number

2	Operate thematic programs (Master)		8	9	8	9	Number
3	Operate research-based program (Master)		8	9	7	9	Number
4	Seek for funds/scholarships to support students	Master programs	44 students enrolled	60 students enrolled	61 students enrolled	60 students enrolled	Number
		Doctoral programs	54 students enrolled	54 students enrolled	57 students enrolled	57 students enrolled	
5	Conduct fresh graduate employment survey of master and doctoral graduates (annually).	Master	91	90	52 (all fresh graduates)	90	Number of responses
		PhD	8	18	26 (9 new graduates)	10	Number of responses
6	Internationalize Master programs through our regional and international partnerships.	Programs involved	5	6	5	7	Number
		Student inbound mobility	1	5	1	5	Number
		Student outbound mobility	15	15	22	15	Number
		Staff mobility	2	5	6	9	Number
		Guest lecturer	0	3	6	9	Number
7	Increase communication among campus community, faculty staff and prospective students.		Website, Facebook, Telegram	Website, Facebook, Telegram, study fair, promotional video	Website, Facebook, Telegram	Website, Facebook, Telegram, study fair, promotional video	Means of communication
8	Develop E-learning courses		-	-	-	5	Number
9	Increase number of research topics that respond to the societies needed through support	Master	38	40	35	40	Number

	from research fund institutions such as ministries, LBE/JICA project, WB project.	PhD	10	10	13	10	Number
10	Increase number of students' publications in journals/conferences	Master	29 (27 journal articles)	60	50 (all journal articles)	55	Number
		PhD	24 (21 journal articles)	20	19 (16 journal articles)	30	Number
11	Enroll PhD students		61	10 new enrolled	57 (13 new enrolled)	10 new enrollments	Number
12	Number of PhD students graduated		19	37 (planned 18 new graduates)	28 (9 new graduates)	38 (plan 10 new graduates)	Number
13	Enroll Master students for the full-time thematic master programs		124	150	139	150	Number
14	Number of Master students graduated (accumulated)		411	500 (planned 89 new)	463 (52 new graduates)	553 (plan 90 new graduates)	Number
15	Implementation of EDC-AFD-EU project to support Master and Doctoral program in Energy and Technology Management 2023-2027		13 (2 PhD)	25 (3 PhD)	27 (4 PhD)	10 (new, 0 PhD)	Number of master and PhD students

3.3.3. Master Programs

3.3.3.1. Overview

The master programs at ITC were authorized by the Ministry of Education Youth and Sport of Cambodia since 2007 and launched the first promotions of different programs successively from 2010. The curricula were continuously updated from which a remarkable change from departments-based operation to a centralization at Graduate School in 2017. Six master programs were transformed to be thematic so that the students can be trained in multi-disciplinary skills.

In the academic year 2024-2025, the Graduate School of ITC offers 8 full-time thematic Master programs in the field of engineering and applied science (cf. table below). The calendar of semester 1 is from October 28, 2024 to February 14, 2025 and the semester 2 from March 03, 2025 to July 04, 2025.

List of Thematic Master Programs

No	Program (Master of Engineering)	Eligible student's background	Promo.	Descended from	Remark
1	Master of Materials and Structural Engineering (M-MSE)	GCI, GIM, GGG, GRU, others equivalent field	14 (since 2010)	MGCI (+MGIM)	<ul style="list-style-type: none"> • In operation • Program Head: <i>Dr. LIM Sovanvichet</i> • Double degree with INSA de Rennes since 2010 • Double degree with Université de Rennes and Université Toulouse III-Paul Sabatier since 2023 • Double degree with Université Sorbonne Paris Nord since 2024
2	Master of Energy Technology and Management Engineering (M-ETM)	GIM, GEE, others equivalent field	8 (since 2011)	MGIM (+MGEE)	<ul style="list-style-type: none"> • In operation • Program Head: <i>Dr. KHON Kimsrornn</i> • Double degree with Grenoble INP since 2024 • Financial support by EDC-AFD-EU project 2023-2027
3	Master of Water and Environmental Engineering (M-WEE)	GRU, GCA, GCI, GGG, others equivalent field	10 (since 2012)	MGRU	<ul style="list-style-type: none"> • In operation Program Head: <i>Dr. THENG Vouchlay</i>
4	Agro-industrial Engineering (M-AIE)	GCA, GGG, RUPP, RUA, others equivalent field	10 (since 2012)	MGCA	<ul style="list-style-type: none"> • In operation • Program Head: <i>Dr. TY Boreborey</i>
5	Master of Computer Science (M-ECS)	GIC, GTR, others equivalent field	10 (since 2013)	MGIC	<ul style="list-style-type: none"> • In operation • Program Head: <i>Mr. HENG Rathpisey</i>

6	Master of Mechatronics, Information and Communication Engineering (M-MIC)	GTR, GIM, GEE, GIC, others equivalent field	8 (since 2012)	MGIM (+MGEE, +MGIC)	<ul style="list-style-type: none"> • In operation • Program Head: <i>Dr. PEC Rothna</i> • Double degree with IMT Mines Alès since 2021
7	Master of Transport Engineering (M-TIE)	GTI, GCI, GIM, GIC, GEE, others equivalent field	4 (since 2020)	-	<ul style="list-style-type: none"> • In operation • Program Head: <i>Dr. SAUM Narith</i>
8	Master of Data Science (M-DAS)	AMS, GIC, GEE, MATH, others equivalent field	2 (since 2022)	AMS (+MGIC)	<ul style="list-style-type: none"> • In operation • Program Head: <i>Dr. PHAUK Sökkhey</i>
9	Master of Architectural Engineering	GAR, GTI, GRU, GCI, GIM, RUFA, others equivalent field	In 2025-2026	-	<ul style="list-style-type: none"> • Licensed by MoEYS on November 27, 2024 • Operate in next year • Program Head: <i>Ms. KET Kannary</i>

Enrollment and Scholarship in 2024-2025

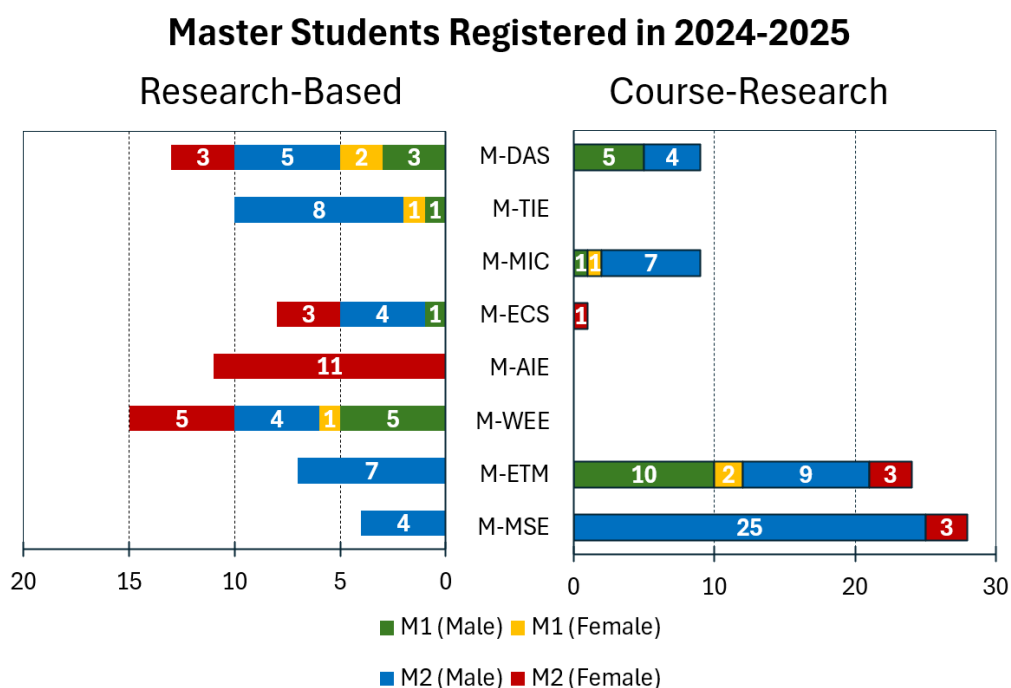
The official announcement has been disclosed at ITC, at Graduate School and on ITC Facebook pages and Telegram channels. In general, the duration for each Master program is 2 or 3 years, classified as year 1 level (M1) and year 2 level (M2). For students holding ITC Engineer's degree, they are allowed to enter directly the M2 program, thus being able to spend only 1 year more in addition to 5 years in engineering program to complete the master's degree (5+1 program). However, this opportunity is selective.

In the academic year 2024-2025, there are in total 139 students (36 females) enrolled into 8 master programs and 61 students receive scholarships. For the double degree programs, there are 14 students registered in the M-MSE under the double degree framework, 15 students receive the mobility supports of Erasmus+ (9 at INSA Rennes, 1 at USPN, 2 at Uni. Rennes and 2 at Uni. Toulouse 3) and 3 students registered at IMT Mines Alès for the M-MIC with supports of HEIP, ITC-IMT, Eiffel and 5 students registered at Grenoble INP for the M-ETM with supports of EDC-AFD-EU. On the other hand, there are 7 outbound exchange master students: 3 to INSA Rennes, 2 to University of Namur (supported by Erasmus+), 2 to Grenoble INP (supported by EDC-AFD-EU); and 1 inbound exchange master student from INP Grenoble. The details are presented in the tables below.

Number of Students enrolled in 2024-2025

Master Programs	Partial or Full Scholarship Students				Non-scholarship Students				Total	Female
	M1		M2		M1		M2			
	Total	F	Total	F	Total	F	Total	F		
M-MSE	-	-	11	1	-	-	21	2	32	3
M-ETM	12	2	13	3	-	-	6	0	31	5
M-WEE	1	1	6	3	5	0	3	2	15	6
M-AIE	-	-	7	7	-	-	4	4	11	11
M-ECS	-	-	2	2	1	0	6	2	9	4
M-MIC	2	1	6	0	-	-	1	0	9	1
M-TIE	-	-	-	-	2	1	8	0	10	1
M-DAS	-	-	1	0	10	2	11	3	22	5
Total	15	4	46	16	18	3	60	13	139	36

The following graph shows the distribution of students by study's pathways.



In the academic year 2024-2025, there are in total 61 students (20 females) receive the scholarship supports. The detail sources of scholarships are reported in the table below.

Sources of Scholarships/funding in 2024-2025

N°	Type /Funder	Benefit	Number of beneficiaries	Remark
1	EDC-AFD-EU	100% Tuition Fee + Monthly allowance	23	
2	HEIP-NUBB	100% Tuition Fee	2	
3	HEIP2	100% Tuition Fee	3	
4	HEIP-C1	100% Tuition Fee	3	
5	ITC	100% Tuition Fee	2	
6	ITC-IMT	100% Tuition Fee + Mobility	1	
7	IRD	Tuition Fees/Research Fund	10	
8	ARES-CAMBOFISH	Tuition Fees/Research Fund	1	
9	DCLab	Tuition Fees/Research Fund	3	
10	Erasmus+	Mobility	11	
11	Eiffel	Mobility	1	
12	ADB	100% Tuition Fee	1	
Total			61	

Graduates and Tracer study

The number of graduated master students from the academic year 2010-2011 to 2023-2024 is in total 463 graduates (119 females). In the last academic year, there are 52 new graduates (13 females) in which 19 graduates (7 females) benefitted from partial and full scholarships. For graduates in M-MSE who received double degree from INSA Rennes (cf. section 3.3.3.2), there are in total 94 graduates (11 females), 1 graduate (0 female) is from Université de Rennes and 1 graduate (0 female) is from Université Toulouse III-Paul Sabatier, from the first to fourteenth promotion, in which there are 7 new graduates (0 female) in 2023-2024. For the graduates in M-MIC who received double degree from IMT Mines Alès, there are in total 2 graduates (1 female) from the first to second promotion, in which there is 1 new graduate (1 female) in 2023-2024. Lists of Master Thesis posted on the webpage of the Graduate School (GS-ITC).

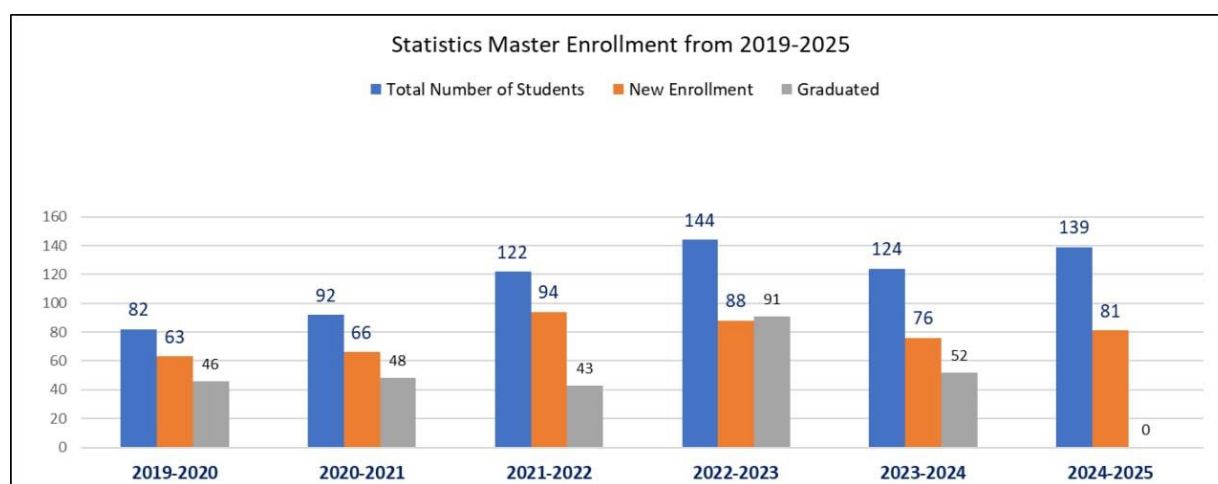


The statistics of master graduates are reported in Table below.

Number of Students graduated from master programs in 2023-2024

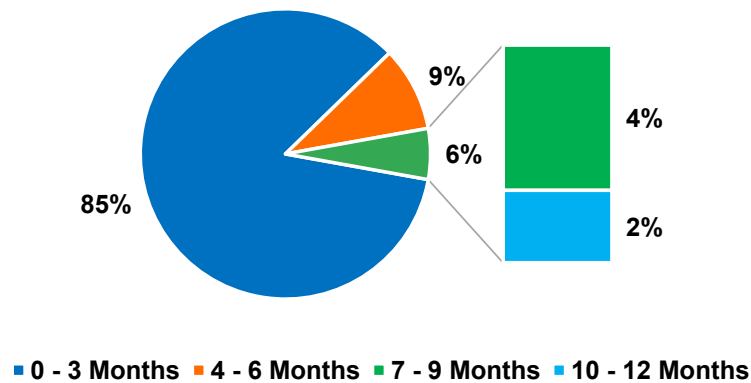
Program	Number of students graduated in 2023-2024						Cumulative graduated students from Promotion 1		
	Partial or Full Scholarship Students		Non-scholarship students		Total	Female			
	Total	F	Total	F			Number of promotions	Total	Female
M-MSE	7	0	4	0	11	0	14	130	14
M-ETM	2	1	4	0	6	1	9	45	1
M-WEE	2	1	1	1	3	2	10	131	54
M-AIE	2	2	1	1	3	3	9	45	35
M-ECS	1	0	3	1	4	1	10	44	6
M-MIC	4	3	8	0	12	3	9	44	5
M-TIE	-	-	4	0	4	0	4	13	1
M-DAS	1	0	8	3	9	3	2	11	3
Total	19	7	33	6	52	13	Total	463	119

The following figure displays the evolution of enrollments and graduates from 2019 to the present time.



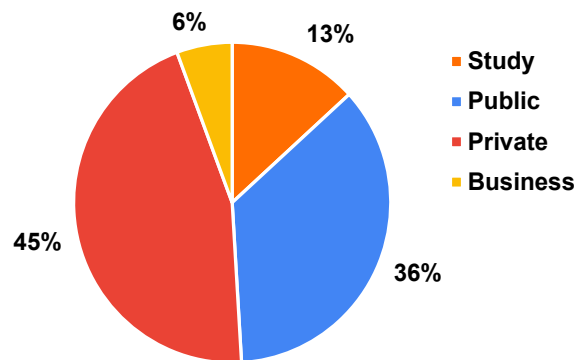
A survey on fresh graduates in 2023-2024 was conducted via Google Form. The objectives of this survey are to trace the employability and skills development of the graduates. 52 graduates responded to the questionnaires, that is 100%. The result of the survey shows that 85% of fresh graduates could find jobs immediately, 9% needed more than 3 months to find jobs and 6% spent more than 6 months to find jobs.

Employment Delay



The survey also reveals the distribution of job sectors for fresh graduates. Thirty-six percent of them work for public sector, 45% work for private sector, 13% continue their study and 6% run their own business.

Job sector



When asking the question “Please evaluate the level of 5 following skills that you gained from your study in master program: creativity, teamwork, critical thinking, problem solving, and entrepreneurship (1 = Very little, 2 = Little, 3 = Much, 4 = Very much)”, more than 88% of them said that they gained (much or very much) the creativity skill, 87% gain the team work skill, 100% gain the critical thinking skill and 91% gain the problem solving skill. However, the rating on entrepreneurship skill remains behind other skills (only 55% of them are satisfied). The observation on job sector also shows that only 6% or 3 of all graduates have run startup or self-businesses after freshly graduating. Therefore, in order to promote startups and self-businesses, strengthening on entrepreneurship and business skills should be considered. Overall, the result shows an improvement if we compare with the 2021-2022 and 2022-2023 surveys (see table below).

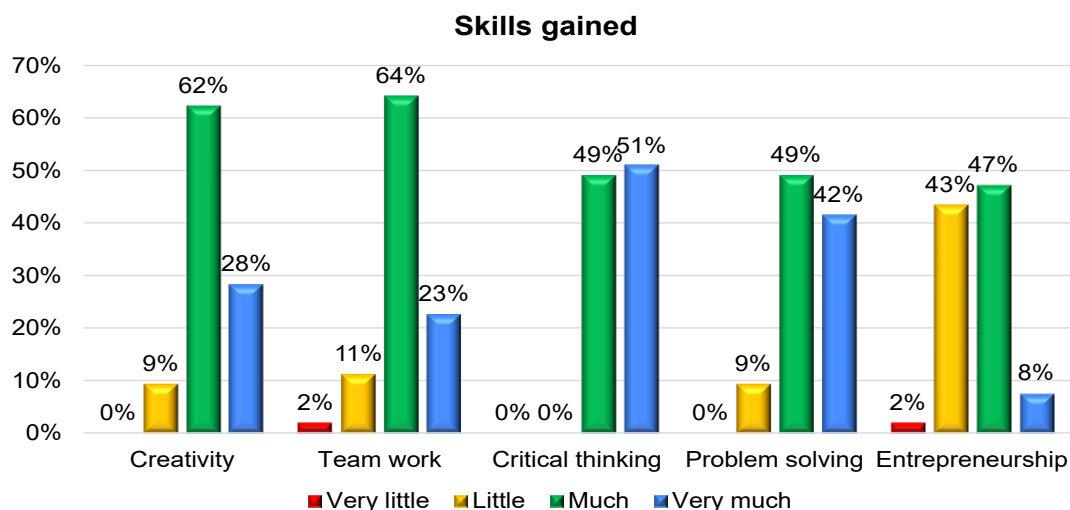


Table: Average score (scale 4) for each skill

Year	# of Graduate	# of Respondent	Creativity	Team-work	Critical thinking	Problem solving	Entrepreneurship
2023-2024	53	53	3.2	3.1	3.5	3.2	2.6
2022-2023	91	91	3.0	3.0	3.2	3.1	2.4
2021-2022	43	33	3.0	3.2	3.2	3.2	2.5

3.3.3.2. Program M-MSE

Program's objective

Master's Degree Program of Materials and Structural Engineering, codeveloped by professionals and experts of INSA Rennes, France, is designed to provide students expertise in research, innovation, and complex problem solving of diverse engineering topics related to materials properties and structural engineering. In this program, qualified students can apply for double degrees issued by ITC and by INSA Rennes, and they can choose to study at ITC or at INSA Rennes.

Program Coordinator: Dr. LIM Sovannvichet

Curriculum and syllabus

M-MSE is a full-time program (1 to 3 years), classified into two levels, M1 and M2, and is offered in two pathways: research-based and course-research pathways. For course-research pathway, students are required to take 52 credits, 40 credits for coursework and 12 credits for the last semester report/thesis defense of their final project/thesis. For research-based pathway, students are required to take 54 credits, 12 credits for coursework and 42 credits for research activities, research results, thesis, and thesis defense. Detailed curriculum can be found on the website of GS-ITC.

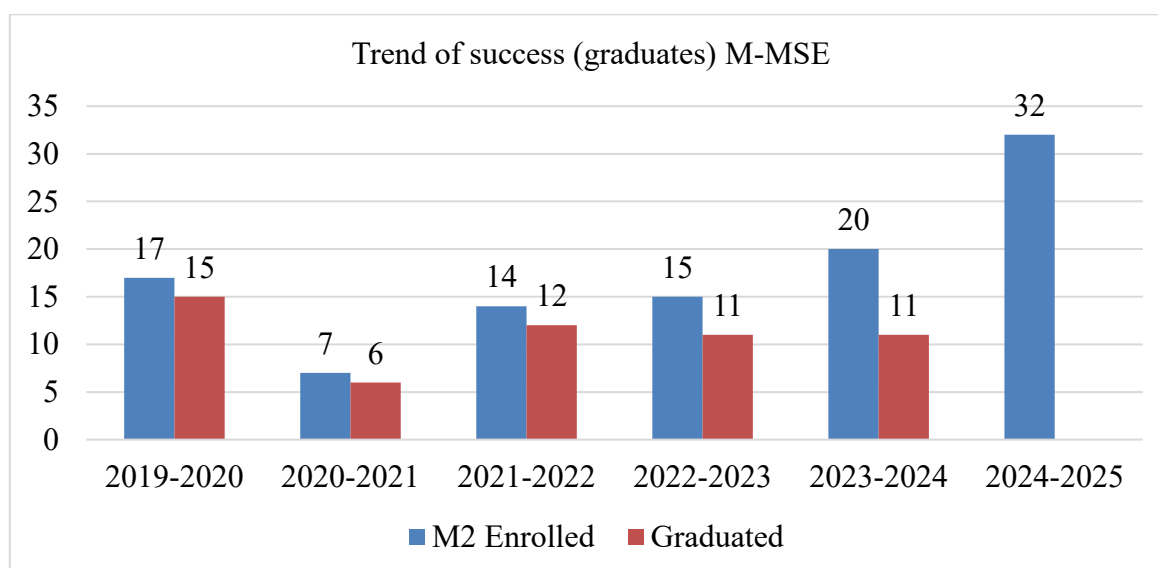
Students and alumni

Starting in 2010-2011 academic year, in total, 130 students (14 females) graduated from the program, in which 94 (11 females) or 72% (8% females) of them obtained double degrees from

INSA Rennes, 1 (0 female) from Université de Rennes and 1 (0 female) from Université Toulouse III-Paul Sabatier. In the academic year 2024-2025, there are 32 students (3 female) enrolling in the program and the details are reported in the table below.

Pathway	M1		M2		Total	Female	Remark
	Total	F	Total	F			
Course-research	0	0	28	3	28	3	Double degree: (9) INSA Rennes, (1) USPN, (2) Uni. Rennes, (2) Uni. Tls 3
Research-based	0	0	4	0	4	0	
Total	0	0	32	3	32	3	

The records of enrollments in M2 and numbers of graduates from 2019 to 2025 is displayed in the following figure. We observe that rate of success (ratio graduate/ M2 enrolled) is 75% across these time periods.



Scholarships

In this academic year 2024-2025, 11 students obtain scholarships and funding support from Erasmus+ for international mobilities to study or to do internship in partner universities.

Lecturers

This program involves over 15 faculty members whose specializations are in materials science and engineering, civil engineering, and structural engineering, etc. All of them hold doctoral degrees from Europe, Japan, and ASEAN. They serve as teaching resources and superiors for the master students M-MSE. Some students are jointly supervised by professors from partner universities. The list of faculty members for M-MSE can be found in Annex 5 or on the website of GS-ITC.

Theses and publications

In the academic year 2023-2024, eleven master theses were successfully defended, in which 2 of them are co-supervised and defended to the committee with Université de Rennes and Université Toulouse III-Paul Sabatier. The list of published theses can be found in Annex 6 or on the website of GS-ITC.

Regarding the dissemination and publication, 2 articles were published to national journals, 4 conference papers, 8 posters. The list of publications can be found in Annex 7 or on the website of GS-ITC or via <https://techno-srj.itc.edu.kh/search?topic=10>.

3.3.3.3. Program M-ETM

Program's objective

Master's Degree Program of Energy Technology and Management Engineering, technically supported by professionals and experts from European and ASEAN partner universities, is designed to provide students with technical skills, competencies, and expertise in the field of energy technology and management. Students will be equipped with advanced research methods, energy-related techniques and regulations, project management, and problem-solving methods. Graduates of M-ETM will be able to design effective techniques and tools, manage projects, and propose suitable solutions toward solving real-world energy-related problems.

Program Coordinator: Dr. KHON Kimsornn

Curriculum and syllabus

M-ETM is a full-time program (1 to 3 years), classified into two levels, M1 and M2, and is offered in two pathways: research-based and course-research pathways. For course-research pathway, students are required to take 54 credits, 42 credits for coursework and 12 credits for the last semester report/thesis defense of their final project/thesis. For research-based pathway, students are required to take 54 credits, 12 credits for coursework and 42 credits for research activities, research results, thesis, and thesis defense. Detailed curriculum can be found on the website of GS-ITC.

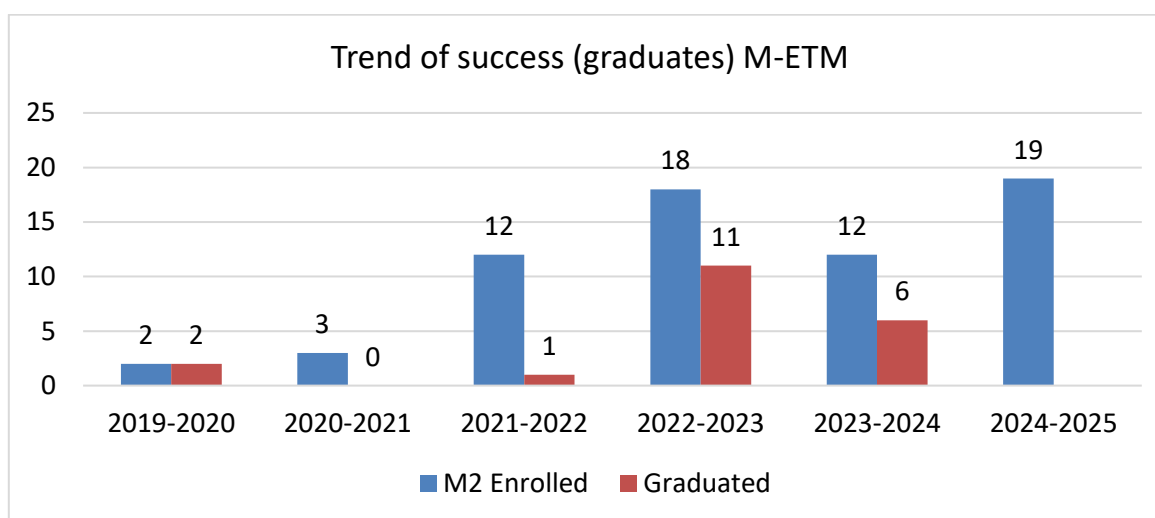
The curriculum of M-ETM is reviewed annually by the program's curriculum committee with consultation with stakeholders and partner universities, especially with INP Grenoble, France. In 2023, this program was evaluated as satisfactory by external expert panels (both technical and educational aspects) as it met the criteria set by the higher education's educational experts from the MoEYS and the World Bank (WB).

Alumni and Students

From 2016-2017 academic year, in total, 45 students (1 female) graduated from the program. Currently, there are 31 students (5 females) enrolling in the program and the details are reported in the table below.

Pathway	M1		M2		Total	Female	Remark
	Total	F	Total	F			
Course-research	12	2	12	3	24	5	Double degree: (5) Grenoble INP
Research-based	0	0	7	0	7	0	
Total	12	2	19	3	31	5	

The records of M2 enrollments and numbers of graduates from 2019 to 2025 is displayed in the following figure. We observe that rate of success (ratio graduate/ M2 enrolled) is only 43% across these time periods, marking one of the low graduate rates.



Scholarships

In this academic year 2024-2025, in total 25 students (5 females) obtain scholarships and funding support: 23 from EDC-AFD-EU (4 females) under the Platform for Research and Training on the Power System, 1 from HEIP-NUBB, and 1 from HEIP (1 female).

Lecturers

This program involves over 14 faculty members whose specializations range from electrical energy, renewable energy to energy power management. Half the faculty members (7) hold doctoral degrees from Europe, Japan, Korea, and ASEAN. They serve as teaching resources and supervisors for the master students M-ETM. The list of faculty members for M-ETM can be found in Annex 5 or on the website of GS-ITC.

Theses and publications

In the academic year 2023-2024, six master theses were successfully defended. All of them were conducted under the research-based pathway. The list of published theses can be found in Annex 6 or on the website of GS-ITC.

Regarding the dissemination and publication, the list of publications can be found in Annex 7, on the website of GS-ITC, or the webpage: <https://techno-srj.itc.edu.kh/>.

3.3.3.4. Program M-WEE

Program's objective

Master's Degree Program of Water and Environmental Engineering, technically supported by professionals and experts from European and ASEAN partner universities, is designed to provide students with technical skills, competencies, and expertise in the field of water and environment. Students will be equipped with advanced research methods, water-related techniques, modern modeling tools and problem-solving methods, and after graduation, they will be able to design effective techniques and tools, manage projects, and propose suitable solutions toward solving real-world problems including water supply and sanitation, irrigation and drainage, disaster management, wastewater treatment and disposal systems, transport and disposal systems and drainage systems.

Program Coordinator: Dr. THENG Vouchlay

Curriculum and syllabus

M-WEE is a full-time program (1 to 3 years), classified into two levels, M1 and M2, and is offered in two pathways: research-based and course-research pathways. For course-research pathway, students are required to take 54 credits, 42 credits for coursework and 12 credits for the last semester report/thesis defense of their final project/thesis. For research-based pathway, students are required to take 54 credits, 12 credits for coursework and 42 credits for research activities, research results, thesis and thesis defense. There are three specializations in M-WEE, namely, (1) Water Resources Engineering (WRE), (2) Urban Water and Sanitation Engineering (UWE), which receives full financial supports from AFD-EU to support both curriculum development and student scholarships, and (3) Environmental Engineering and Management (EEM). Detailed curriculum can be found on the website of GS-ITC.

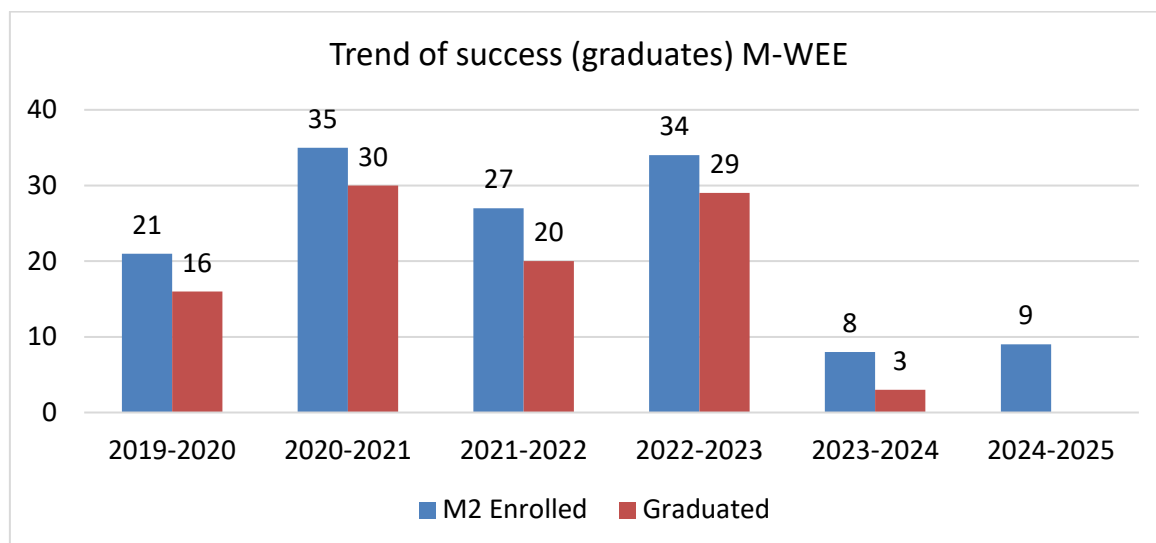
The curriculum of M-WEE is reviewed annually by the program's curriculum committee with consultation with stakeholders and partner universities, especially, with Chulalongkorn University (CU), Thailand--a partner under HEIP project and with Pau University, France. In 2023, this program was evaluated by external expert panels (both technical and educational aspects) to see whether the program meets the modest standard criteria set by the higher education's educational experts from the MoEYS and the World Bank (WB). Overall score results were 3/4 with satisfaction of the evaluation.

Alumni and Students

Starting in 2012-2013 academic year, in total, 131 students (54 females) graduated from the program. Currently, there are 15 students (6 females) enrolling in the program. The details are reported in the table below. This number significantly declines due to no more scholarship supports from major source such as EU-AFD, as the project has concluded successfully.

Pathway	M1		M2		Total	Female	Remark
	Total	F	Total	F			
Course-research	0	0	0	0	0	0	
Research-based	6	1	9	5	15	6	
Total	6	1	9	5	15	6	

The time series of M2 enrollments and numbers of graduates from 2019 to 2025 is displayed in the following figure. We observe that rate of success (ratio graduate/ M2 enrolled) is 78.4% across these time periods.



Scholarships

From 2018 to 2023, 114 students (55 females) received AFD-EU scholarships that cover tuition fees, monthly living allowance, research, and internship funds and 101 students (43 females) graduated. In this 2024-2025 academic year, 7 students (4 females) receive scholarship supports, 1 student (1 female) receive ADB scholarship and 6 students (3 females) receive IRD scholarship.

Lecturers

This program involves over 20 faculty members whose specializations are in water resources, hydrology, environmental engineering, ... Most of them hold doctoral degrees from Europe, Japan, Korea, and ASEAN. They serve as teaching resources and superiors for the master students M-WEE. Some students are jointly supervised by professors from partner universities. The list of faculty members for M-WEE can be found Annex 5 or on the website of GS-ITC.

Theses and publications

In the academic year 2023-2024, three master theses were successfully defended. All of them were conducted under the research-based pathway. The list of published theses can be found in Annex 6 or on the website of GS-ITC.

Regarding the dissemination and publication, the list of publications can be found in Annex 7 or on the website of GS-ITC or via <https://techno-srj.itc.edu.kh/search?topic=10>.

3.3.3.5. Program M-AIE

Program's objective

Master's Degree Program of Agro-industrial Engineering, technically supported by professionals and experts from European and ASEAN partner universities, is designed to provide students with technical skills, competencies, and expertise in the field of agro-industrial engineering. Students

will be equipped with advanced research methods, food processing and development techniques, business and entrepreneurship skills and problem-solving methods. As graduates of M-AIE, they will be able to design innovative techniques and processes, manage projects and propose suitable solutions toward solving real-world problems in food industries. Graduates can also apply their knowledge and skills to do develop their own businesses.

Program Coordinator: Dr. TY Boreborey

Curriculum and syllabus

M-AIE is a full-time program (1 to 3 years), classified into two levels, M1 and M2, and is offered in two pathways: research-based and course-research pathways. For course-research pathway, students are required to take 54 credits, 42 credits for coursework and 12 credits for the last semester report/thesis defense of their final project/thesis. For research-based pathway, students are required to take 54 credits, 12 credits for coursework and 42 credits for research activities, research results, thesis and thesis defense. Detailed curriculum can be found on the website of GS-ITC.

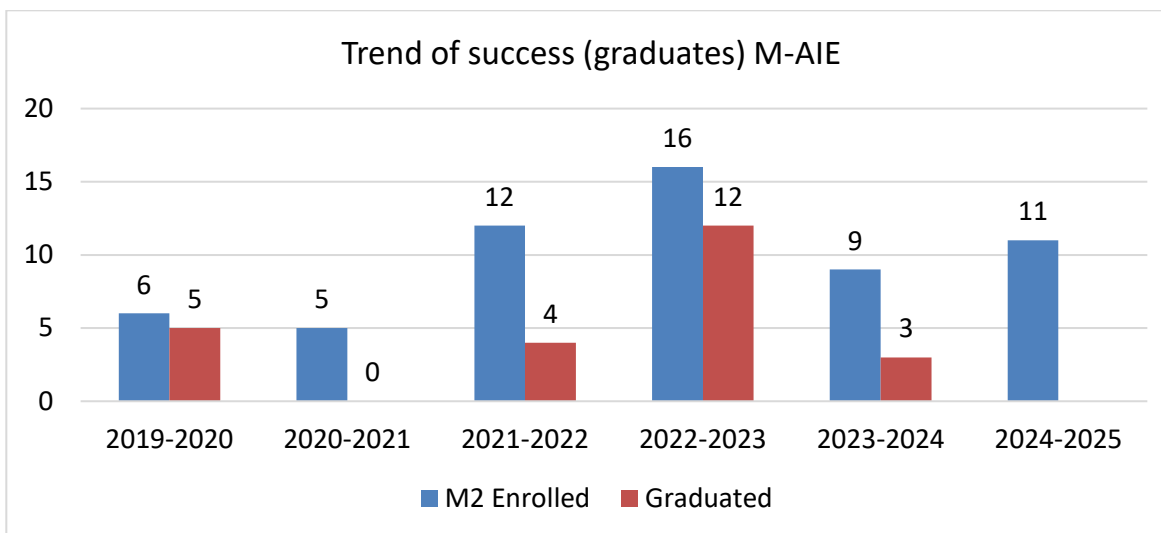
The curriculum of M-AIE is reviewed annually by the program's curriculum committee with consultation with stakeholders and partner universities, especially, with Kasetsart University (KU), Thailand--a partner under HEIP project and AgroSup Dijon, France. In 2023, this program was evaluated by external expert panels (both technical and educational aspects) to see whether the program meets the modest standard criteria set by the higher education's educational experts from the MoEYS and the World Bank (WB). Overall score results were 3/4 with satisfaction of the evaluation.

Alumni and Students

Starting from the academic year 2017-2018, in total, 45 students (35 females) graduated from the program. Currently, there are 11 students (11 females) enrolling in the program and the details are reported in the table below.

Pathway	M1		M2		Total	Female	Remark
	Total	F	Total	F			
Course-research	0	0	0	0	0	0	
Research-based	0	0	11	11	11	11	
Total	0	0	11	11	11	11	

The time series of enrollments and numbers of graduates from 2019 to 2025 is displayed in the following figure. We observe that rate of success (ratio graduate/ M2 enrolled) is 50% across these time periods.



Scholarships

In this academic year 2024-2025, seven students receive scholarships, 2 students obtain scholarships and funding support from HEIP-ITC under the framework of upgrading staff's qualification, 1 female student receive ARES-CAMBOFISH scholarship and 4 females students receive IRD scholarship.

Lecturers

This program involves over 15 faculty members whose specializations are in food science and technology, food processing, agro-industrial engineering, chemical engineering, ... All of them hold doctoral degrees from Europe, Japan, and ASEAN. They serve as teaching resources and superiors for the master students M-AIE. Some students are jointly supervised by professors from partner universities. The list of faculty members for M-AIE can be found Annex 5 or on the website of GS-ITC.

Theses and publications

In the academic year 2023-2024, three master theses were successfully defended. All of them were conducted under the research-based pathway. The list of published theses can be found in Annex 6 or on the website of GS-ITC.

Regarding the dissemination and publication, twelve articles were published to national journals. The list of publications can be found in Annex 7 or on the website of GS-ITC or via <https://techno-srj.itc.edu.kh/search?topic=10>.

3.3.3.6. Program M-ECS

Program's objective

Master's Degree Program of Computer Science aims to provide students with essential skills and advanced research methods, in the field of Computer Science, Artificial Intelligence (AI) applications and Information Security, to address the current trends of fast-growing technology and digitalization.

Program Coordinator: Mr. HENG Rathpisey

Curriculum and syllabus

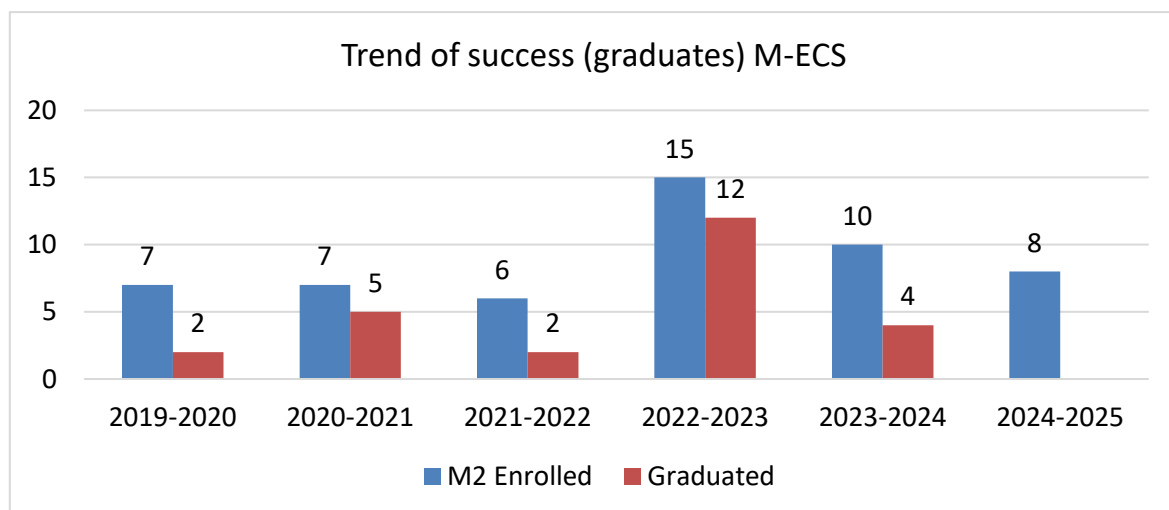
M-ECS is a full-time program, classified into two levels, M1 and M2, and is offered in two pathways: research-based and course-research pathways. For course-research pathway, students are required to take 54 credits, 42 credits for coursework and 12 credits for the last semester report/thesis defense of their final project/thesis. For research-based pathway, students are required to take 54 credits, 12 credits for coursework and 42 credits for research activities, research results, thesis and thesis defense. Detailed curriculum can be found on the website of GS-ITC.

Alumni and Students

Starting in academic 2013-2014, in total, 44 students (6 females) graduated from the program. Currently, there are 9 students (4 females) enrolling in the program and the details are reported in the table below.

Pathway	M1		M2		Total	Female	Remark
	Total	F	Total	F			
Course-research	0	0	1	1	1	1	
Research-based	1	0	7	3	8	3	
Total	1	0	8	4	9	4	

The time series of M2 enrollments and numbers of graduates from 2019 to 2025 is displayed in the following figure. We observe that rate of success (ratio graduate/ M2 enrolled) is 55.6% across these time periods.



Scholarships

In this academic year 2024-2025, two students (2 females) obtain scholarships and funding support, 1 female student receive ITC scholarships and 1 female student receive HEIP-NUBB scholarships.

Lecturers

This program involves over 11 faculty members whose specializations are in software engineering, IT, machine learning, deep learning, AI, information security, computer vision, NLP, data science, etc. Among these, 5 of them hold doctoral degrees from Europe, Japan, Korea, and ASEAN. They serve as teaching resources and superiors for the master students M-ECS. Some students are jointly

supervised by professors from partner universities. The list of faculty members for M-ECS can be found in Annex 5 or on the website of GS-ITC.

Theses and publications

In the academic year 2023-2024, four master theses were successfully defended. All of them were conducted under the research-based pathway. The list of published theses can be found in Annex 6 or on the website of GS-ITC.

Regarding the dissemination and publication, 5 articles were published to national journals. The list of publications can be found in Annex 7, on the website of GS-ITC, or in the webpage of Techno-Science Research Journal: <https://techno-srj.itc.edu.kh/search?topic=3>.

3.3.3.7. Program M-MIC

Program's objective

Multidisciplinary master's degree Program of Mechatronics, Information and Communication Engineering, technically supported by professionals and experts from stakeholders and European partner university, is designed to equip students with a broad range of skills and knowledge that seek the applications in engineering disciplines ranging from mechanical design to software engineering as well as those more purely focused on mechatronics, automation, and robotics. Graduates from this program are employed in industries ranging from mining to manufacturing, agriculture, and defense.

Program Coordinator: Dr. PEC Rothna

Curriculum and syllabus

M-MIC is a full-time program, classified into two levels, M1 and M2, and is offered in two pathways: research-based and course-research pathways. For course-research pathway, students are required to take 54 credits, 42 credits for coursework and 12 credits for the last semester report/thesis defense of their final project/thesis. For research-based pathway, students are required to take 54 credits, 12 credits for coursework and 42 credits for research activities, research results, thesis and thesis defense. Detailed curriculum can be found on the website of GS-ITC.

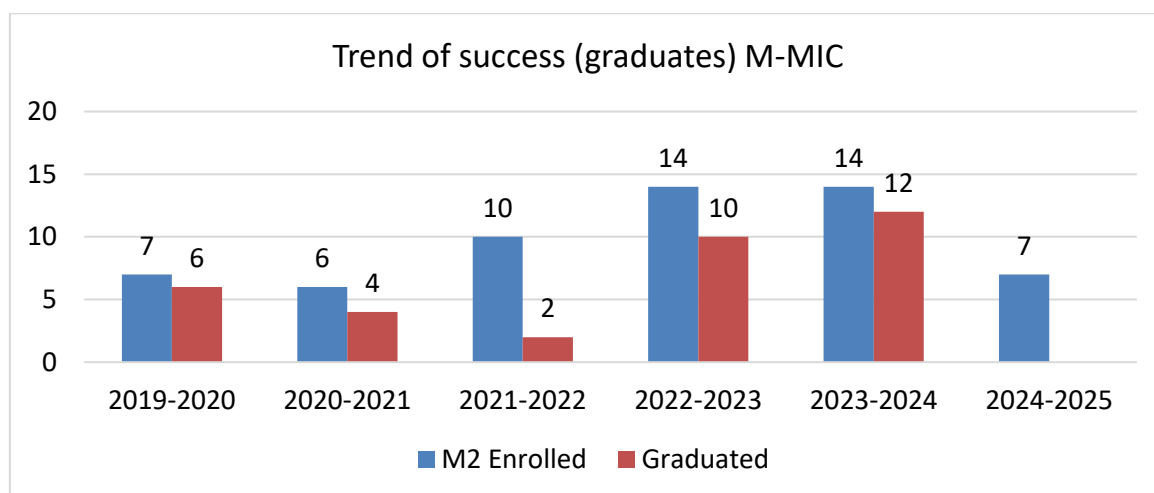
The curriculum of M-MIC is reviewed annually by the program's curriculum committee with consultation with stakeholders and partner university, namely, IMT Mines Alès, France--a partner under HEIP project. In 2023, this program was evaluated by external expert panels (both technical and educational aspects) to see whether the program meets the modest standard criteria set by the higher education's educational experts from the MoEYS and the World Bank (WB). Overall score results were 3/4 with satisfaction of the evaluation.

Alumni and Students

Starting in academic 2013-2014, in total, there were 44 students (5 females) graduated from the program. Currently, there are 9 students (1 female) enrolling in the program and the details are reported in the table below.

Pathway	M1		M2		Total	Female	Remark
	Total	F	Total	F			
Course-research	2	1	7	0	9	1	Double degree: (3) IMT Mines Alès
Research-based	0	0	0	0	0	0	
Total	2	1	7	0	9	1	

The time series of enrollments and numbers of graduates from 2019 to 2025 is displayed in the following figure. We observe that rate of success (ratio graduate/ M2 enrolled) is 66.7% across these time periods.



Scholarships

In this academic year 2024-2025, eight students (1 female) obtain scholarships and funding support, 1 student receive Eiffel scholarships, 3 students receive HEIP scholarships, 1 female student receive ITC-IMT scholarships and 3 students receive DCLab scholarships.

Lecturers

This program involves over 15 faculty members whose specializations are in electronics, mechanical engineering, control system, mechatronics, robotics, automation, machine learning, and data science, IT, telecommunication engineering, etc. Most of them hold doctoral degrees from Europe, Japan, Korea, and ASEAN. They serve as teaching resources and superiors for the master students M-MIC. Some students are jointly supervised by professors from partner universities. The list of faculty members for M-MIC can be found in Annex 5 or the website of GS-ITC.

Theses and publications

In the academic year 2023-2024, twelve (3 females) master theses were successfully defended. 3 students (2 females) were conducted under the research-based pathway and 9 students (1 female) were conducted under the course-research pathway. The list of published theses can be found in Annex 6 or in or the website of GS-ITC.

Regarding the dissemination and publication, ten articles were published to national journals. The list of publications can be found in Annex 7 or in the website of GS-ITC or via <https://techno-srj.itc.edu.kh/search?topic=10>.

3.3.3.8. Program M-TIE

Program's objective

Master's Degree Program of Transport Engineering is designed to provide students expertise in research, innovation, and complex problem solving of diverse engineering topics related to transport engineering and public infrastructure. It addresses the solution toward land, air and water transportation issues including traffic congestion and accidents, public transport systems, transport policy, logistic networks, energy consumption, aviation issues, environmental matters, etc.

Program Coordinator: Dr. SAUM Narith

Curriculum and syllabus

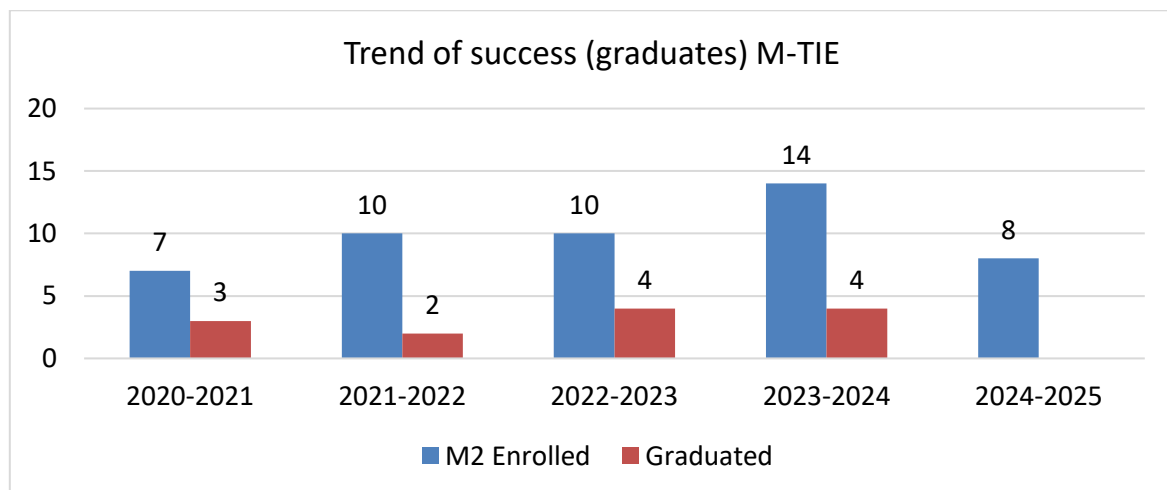
M-TIE is a full-time program, classified into two levels, M1 and M2, and is offered in two pathways: research-based and course-research pathways. For course-research pathway, students are required to take 52 credits, 40 credits for coursework and 12 credits for the last semester report/thesis defense of their final project/thesis. For research-based pathway, students are required to take 54 credits, 12 credits for coursework and 42 credits for research activities, research results, thesis and thesis defense. Detailed curriculum can be found on the website of GS-ITC.

Alumni and Students

Starting in academic 2020-2021, in total, 13 students (1 female) graduated from the program. Currently, there are 10 students (1 female) enrolling in the program and the details are reported in the table below.

Pathway	M1		M2		Total	Female	Remark
	Total	F	Total	F			
Course-research	0	0	0	0	0	0	
Research-based	2	1	8	0	10	1	
Total	2	1	8	0	10	1	

The time series of enrollments and numbers of graduates from 2020 to 2025 is displayed in the following figure. We observe that rate of success (ratio graduate/ M2 enrolled) is only 32% across these time periods, marking one of the low graduate rates.



Scholarships

In this academic year 2024-2025, there are no scholarship students.

Lecturers

This program involves over 14 faculty members whose specializations are in transport engineering, logistics, civil engineering, public infrastructure, etc. Among these, 11 of them hold doctoral degrees from Europe, Japan, Korea, and ASEAN. They serve as teaching resources and superiors for the master students M-TIE. Some students are jointly supervised by professors from partner universities. The list of faculty members for M-TIE can be found in Annex 5 or in the website of GS.

Theses and publications

In the academic year 2023-2024, four master theses were successfully defended. All of them were conducted under the research-based pathway. The list of published theses can be found in Annex 6 or in the website of GS.

The list of publications can be found in Annex 7 or in the website of GS-ITC or via <https://techno-srj.itc.edu.kh/search?topic=10>.

3.3.3.9. Program M-DAS

Program's objective

Master's Degree Program of Data Science, codeveloped by professionals and experts of IMT and ENSIIE, France, uses real-world problems and situations to prepare graduates for roles as strategic thought leaders who leverage predictive modeling to drive decision making. Students will develop in-depth understanding of key technologies in data science and business analytics: data mining, machine learning, visualization techniques, predictive modeling and Statistics.

Program Coordinator: Dr. PHAUK Sökkhey

Curriculum and syllabus

M-DAS is a full-time program, classified into two levels, M1 and M2, and is offered in two pathways: research-based and course-research pathways. For course-research pathway, students are required to take 54 credits, 42 credits for coursework and 12 credits for the last semester report/thesis defense of their final project/thesis. For research-based pathway, students are required to take 54 credits, 12 credits for coursework and 42 credits for research activities, research results, thesis and thesis defense. Detailed curriculum can be found on the website of GS-ITC.

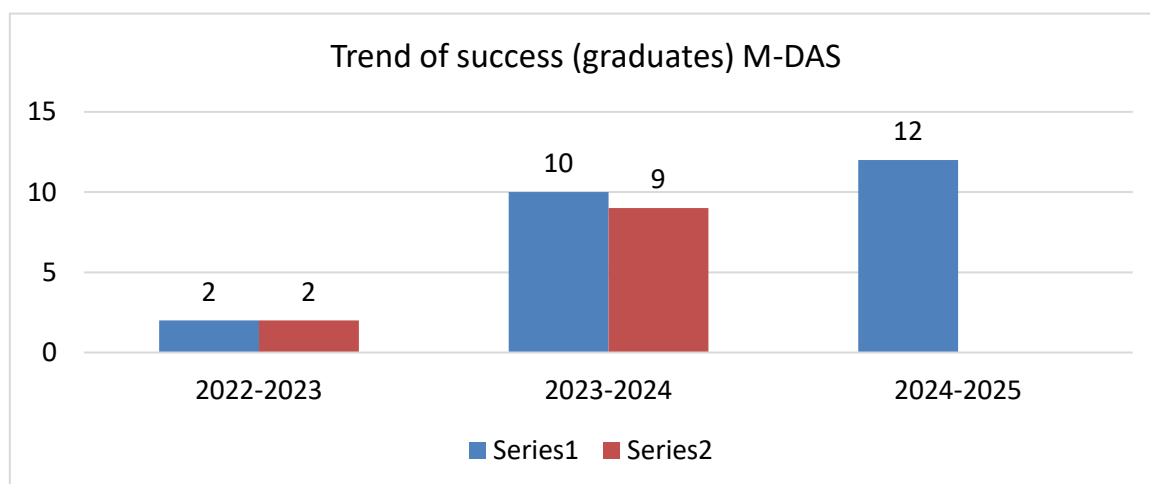
The curriculum of M-DAS is reviewed annually by the program's curriculum committee with consultation with stakeholders and partner universities, especially, with ENSIIE, France--a partner under HEIP project. In 2023, this program was evaluated by external expert panels (both technical and educational aspects) to see whether the program meets the modest standard criteria set by the higher education's educational experts from the MoEYS and the World Bank (WB). The program was evaluated with satisfactory.

Alumni and Students

Starting in academic 2022-2023, in total, 11 students (3 females) graduated from the program. Currently, there are 22 students (5 females) enrolling in the program and the details are reported in the table below.

Pathway	M1		M2		Total	Female	Remark
	Total	F	Total	F			
Course-research	5	0	4	0	9	0	
Research-based	5	2	8	3	13	5	
Total	10	2	12	3	22	5	

The records of enrollments and numbers of graduates from 2022 to 2025 is displayed in the following figure. We observe that rate of success (Graduates/ M2 enrolled) is 92% across these time periods.



Scholarships

In this academic year 2024-2025, 1 student obtains scholarships and funding support from ITC scholarships, 2 students (1 female) receive mobilities support under ARES to do internship in UNamur, Belgium.

Lecturers

This program involves over 15 faculty members whose specializations are in software engineering, IT, machine learning, deep learning, AI, NLP, data science, data mining, mathematics, and statistics, etc. Among these, 7 of them hold doctoral degrees from Europe, Japan, Korea, and ASEAN. They serve as teaching resources and superiors for the master students M-DAS. Some students are jointly supervised by professors from partner universities. The list of faculty members for M-DAS can be found in Annex 5 or on the website of GS-ITC.

Theses and publications

In the academic year 2023-2024, nine (3 females) master theses were successfully defended. 4 students were conducted under the research-based pathway and 5 students (3 females) were conducted under the course-research pathway. The list of published theses can be found in Annex 6 or the website of GS-ITC.

Regarding the dissemination and publication, two articles were published in a national journal. The list of publications can be found in Annex 7, the webpage of GS-ITC or via <https://techno-srj.itc.edu.kh/search?topic=10>.

3.3.4. Doctoral Programs

3.3.4.1. Overview

The doctoral programs at ITC were authorized by the Ministry of Education, Youth and Sport by the **Prakas No. 909 AYK. BrK**, dated the 29th September 2017, to operate 5 programs as listed in table below.

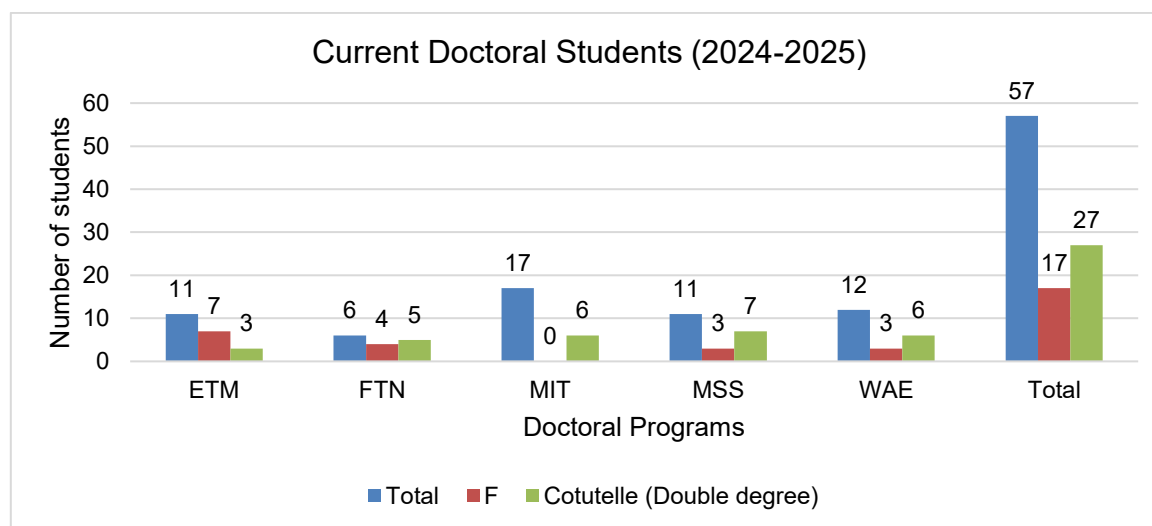
No	Abbrev.	Name in English	First promotion
I	DEng	Doctor of Engineering	2017
1	D-FTN	Food Technology and Nutrition	2017 (Cotuelle)
2	D-MSS	Materials Science and Structures	2017 (Cotuelle)
3	D-MIT	Mechatronics and Information Technology	2018 (Cotuelle)
4	D-WAE	Water and Environment	2018 (Cotuelle)
5	D-ETM	Energy Technology and Management	2018 (Cotuelle)

In the academic year 2024-2025, 57 doctoral students (17 females) are enrolled, in which 26 (12 females) of them are in cotutelle/co-supervision with partner universities (16 with universities in France, and 10 with universities in Belgium). All students enrolled receive financial support from several projects and organizations. Table and Figure below show the overall statistics of PhD students.

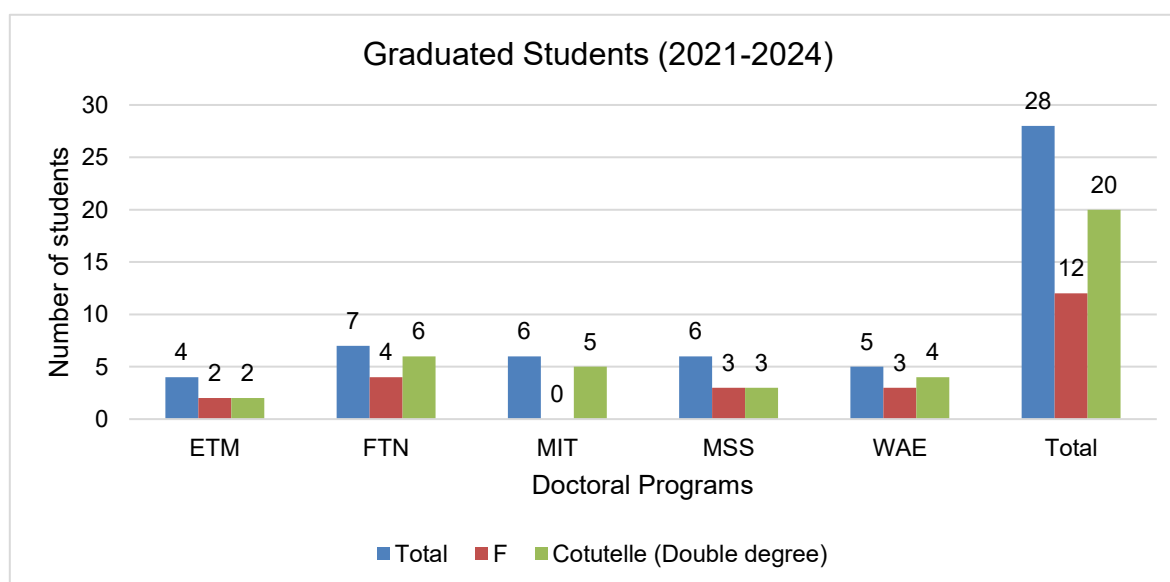
Statistics of PhD students

Program											Total	F
Name	WAE		FTN		MIT		MSS		ETM			
Number	Total	F	Total	F	Total	F	Total	F	Total	F		
Total number of PhD graduates	4	2	7	4	6	0	6	3	5	3	28	12
PhD Graduated in 2023-2024	-	-	3	2	2	0	1	1	3	1	9	4
Total number of PhD students in 2024-25	11	7	6	4	17	0	11	3	12	3	57	17
PhD Enrolled in year 1	2	1	-	-	3	0	3	1	5	3	13	5
PhD Enrolled in year 2	5	3	-	-	1	0	2	0	2	0	10	3

PhD Enrolled in year 3	1	1	2	1	2	0	1	1	-	-	6	3
PhD Enrolled in year 4	-	-	3	3	2	0	2	0	1	0	8	3
PhD Enrolled in year 5	3	2	1	0	9	0	3	1	4	0	20	3
Scholarship	11	7	6	4	17	0	11	3	12	3	57	17



Total number of graduates is 28 (12 females). PhD graduates have jobs and most of them are working in academic institutions. Figure below shows the statistics of PhD graduates at ITC.



Sources of funding

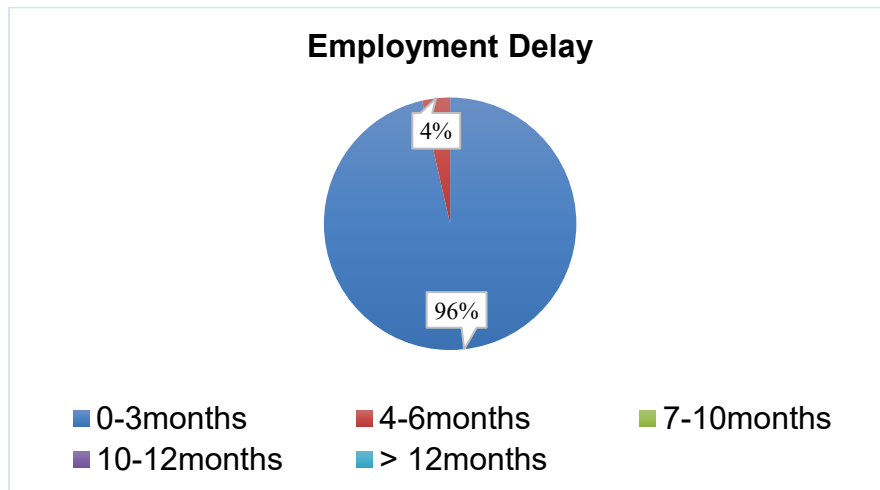
Table below provides the exhaustive list of sources of funding of our students.

Sources of Funding*	Number of Beneficiaries	Number of Beneficiaries (Female)
ARES	2	1
ARES-ITC	3	0
ARES-ITC-HEIP	1	0
ARES-COMBOdIA	1	1
ARES-CAMBOFISH	2	1
BGF	7	3
BGF-ITC	2	1
BGF-ITC/HEIP	1	1
BGF-HEIP	0	0
HEIP	7	3
HEIP-2	2	1
HEIP2-IRD	1	0
HEIP-ITC	1	0
HEIP-NUBB	1	0
ITC-Erasmus+/HEIP	1	1
ITC	3	1
KIT-ITC	0	0
USAID-WoM	1	1
NPIC	9	0
NIPTIC	1	0
MoE	1	0
IRD	0	0
NUM	1	0
UHST	1	0
EDC-AFD-EU	4	1
CCCA	1	0
GAWC	1	1
Eiffel	1	0
RAC	1	0
Total	57	17

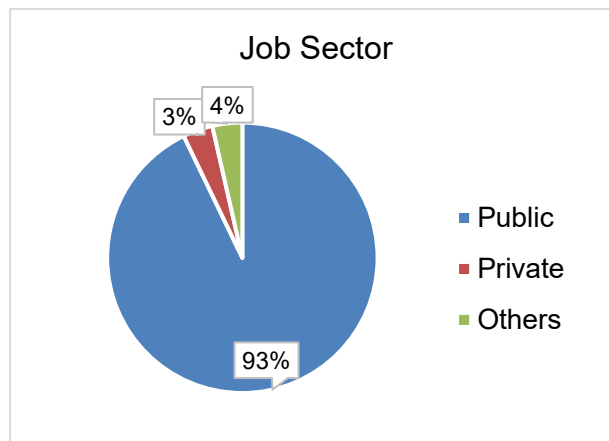
**19 (6 females) of the 57 students, who are ITC staffs, receive co-funding from ITC. Three students receive tuition fee scholarship from ITC.*

Tracer Study of doctoral programs

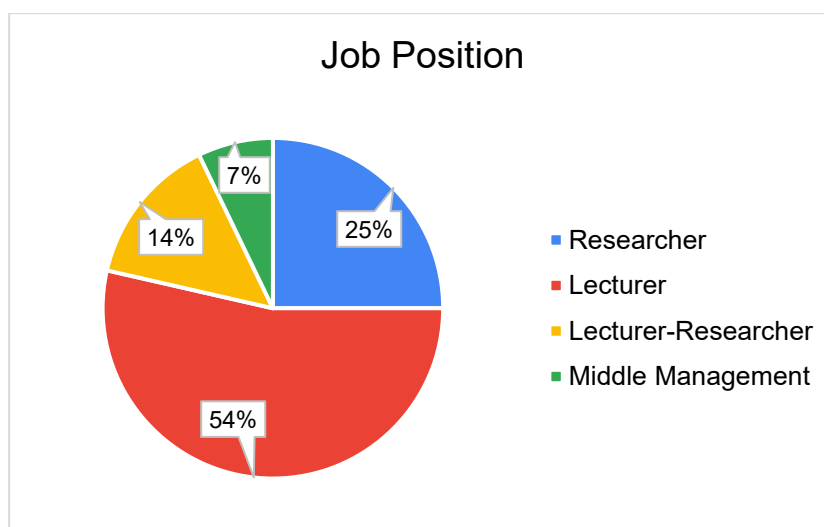
In the exit survey, there were 28 respondents out of 28 graduated students. The employment delay figure shows that 96% of the graduates got employed within 0-4 months, while 4% of them had a job within 4-6 months.



Among them, 93% and 3% are working in public sector and private sector, respectively.

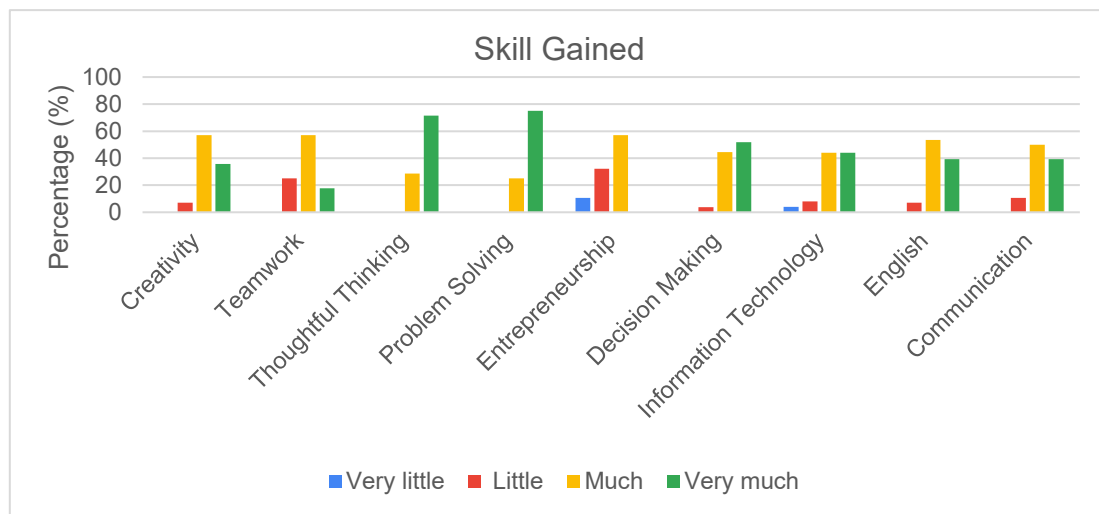


Regarding their job position, most of the doctoral graduates are working as researcher or lecturer or both, and only 7% serve in the middle management level.



All the graduates were asked about what skills they had gained during their doctoral program journey. 70-75% of them responded that they gained very much in thoughtful thinking and problem-solving skills. 57% of them answered that they gained much in teamwork, creativity and

entrepreneurship, while 36% and 18% of them gained very much in creativity and teamwork, and none of them thought they gained very much in entrepreneurship skills.



3.3.4.2. Program D-WAE

Program's Objective

D-WAE, in conjunction with the Research Unit of Water and Environment under RIC-ITC, is one of the five doctoral programs of ITC, established in 2017, recognized by the Ministry of Education Youths and Sports. D-WAE was developed by the relevant experts in Water and Environment Engineering such as lecturers and researchers at ITC with the support from partner universities and institutions. Students can register for a single degree at ITC, or a degree under cotutelle (co-supervision) between ITC and a partner university in France. The cotutelle program is selective and upon the agreement between ITC and the partner university.

D-WAE students will develop in-depth understanding of the key technologies in their research area of Water and Environmental Engineering. D-WAE students will work closely with researchers of WAE research unit (generally, one of them is the student's supervisor) and they also can be co-supervised by the professors from our partner universities or research institutions (France, Belgium, Japan, etc.).

Curriculum and syllabus

D-WAE is a full-time program (3 to 6 years), consist of 54 credits: 21 credits for coursework (Supplementary/Prerequisite and Doctoral courses, and PhD Orientation courses), and 33 credits for research and thesis (3 credits for detailed research proposal, 6 credits for national/international publications, 3 credits for the presentation in scientific conference, 3 credits for seminars, 18 credits for Thesis writing and defense). This program trains doctoral students to be specialized in their advanced research and development field including hydrology, water supply and wastewater, urban environment management, disaster and climate system and other relevant fields. Detailed curriculum can be found on the website of GS-ITC.

Students and Alumni

Starting from the academic year 2017-2018 to 2023-2024, four students (2 females) have graduated from the program. In 2024-2025, there are 2 new students (1 female) enrolling in the program and

the details are reported in the table below. The list of current and graduated students including their including research topic can be found on the website of GS-ITC.

List of current D-WAE students in 2024-2025

No.	Name	Sex	First Reg.	Funding	Cotutelle		Research topic
					Yes/ No	University	
1	LUN Sambo	M	2024	HEIP2-IRD	No		Understanding Groundwater Dynamics and Socio-Hydrological Interactions for Sustainable Development in the Upper Mekong Delta, Cambodia
2	PHOL Mengheak	F	2024	GAWC	No		Effect of Different Water-saving Irrigation Methods for Rice Cultivation, Case Study in Cambodia
3	CHAN Ratboren	M	2023	BGF	Yes	Université de Toulouse	Effect of geomorphological features and land use change on stormflow genesis and stream water quality in headwater catchments of mountainous tropical environment
4	CHANTO Monychot Tepy	F	2023	BGF	Yes	Université de Montpellier	Circulation of Multi-Drug Resistant Bacteria in Humans, Animals and in the Environment in the province of Takeo, Cambodia
5	HENG Chhenglang	F	2023	BGF	Yes	Université de Montpellier	Assessing the effects of land use dynamics on water quality and flood risk using satellite imagery, machine learning and hydrological modeling: the Tonle Sap Lake in Cambodia as a test case
6	PEN Chhorda	F	2023	ITC and MME	No		Chemical Characterization of Acid Mine Drainage from Gold Mining in Monudulkiri Province, Cambodia
7	SOK Serey vathana	M	2023	BGF	Yes	Ecole Nationale Supérieure de Chimie de Rennes	Removal of Organic Micropollutants by Coupling Simultaneous Continuous Adsorption and Sedimentation for Drinking Water Production
8	CHEA Seila	F	2022	USAID-WoM	No		Assessment of Plastic Debris Distribution in Coastal and Mekong River systems of Cambodia towards separation process development
9	LAI Chenda	F	2020	HEIP	Yes	Université de Liège	Optimization of Soil Nutrients for Rice Cultivation Using Experimental and Modeling Approach
10	PHOEURN Chan Arun	F	2020	HEIP	Yes	Université de Liège	Integrated approach of precise irrigation and sustainable laboratory development: the focus on rice farming

11	HIN Chandara	M	2020	NPIC	No		Development of Eco-Friendly and Low-Cost Wastewater Treatment System as an On-site Product
----	--------------	---	------	------	----	--	--

Lecturers and Supervisors

This program involves over 15 faculty members whose specializations are in water resources, hydrology, environmental engineering, and relevant fields. All of them hold doctoral degrees from Europe, Japan, and ASEAN. They are involving in the program for teaching or/and supervising the D-WAE students. Some students are jointly supervised by professors from partner universities. The list of faculty members in D-WAE program can be found in Annex 8 or on the website of GS-ITC.

Theses and publications

Four theses have been published since the academic year 2020-2021. The list of published theses can be found in Annex 9 and on the website of GS-ITC.

Regarding the dissemination and publication, 7 articles were published in international journals. The list of publications is presented in Annex 10 and in the webpage of GS-ITC.

3.3.4.3. Program D-ETM

Program's Objective

D-ETM, in conjunction with the Research Unit of Energy Technology and Management under RIC-ITC, is one of the five doctoral programs of ITC, established in 2017, recognized by the Ministry of Education Youths and Sports. D-ETM was developed by the relevant experts in Energy Technology and Management including the lecturers and researchers at ITC with the support from partner universities and institutions. Students can register for a single degree at ITC, or a degree under cotutelle (co-supervision) between ITC and a partner university in France. The cotutelle program is selective and upon the agreement between ITC and the partner university.

D-ETM students will develop in-depth understanding of the key technologies and engineering in their research area of Energy Technology and Management. D-ETM students will work closely with researchers of ETM research unit (generally, one of them is the student's supervisor) and they also can be co-supervised by the professors from our partner universities or research institutions (France, Belgium, Japan, etc.).

Curriculum and syllabus

D-ETM is a full-time program (3 to 6 years), consist of 54 credits: 21 credits for coursework (Supplementary/Prerequisite and Doctoral courses, and PhD Orientation courses), and 33 credits for research and thesis (3 credits for detailed research proposal, 6 credits for national/international publications, 3 credits for the presentation in scientific conference, 3 credits for seminars, 18 credits for Thesis writing and defense). This program trains doctoral students to be specialized in their respective advanced research and development field such as new and renewable energy, energy efficiency and conservation, smart grid, energy management and other relevant fields. Detailed curriculum can be found on the website of GS-ITC.

Students and Alumni

Starting from the academic year 2017-2018 to 2023-2024, five students (3 females) have graduated from the program. In 2024-2025, there are 5 new students (3 female) enrolling in the program and the details are reported in the table below. The details of current and graduated students with research topic can also be found on the website of GS-ITC.

List of current D-ETM students in 2024-2025

No.	Name	Sex	First Reg.	Funding	Cotutelle		Research topic
					Yes/No	University	
1	ENG Samphors	F	2024	ARES	Yes	University of Mons	Sustainable Energy System Planning for LV Microgrid Management: A Case Study in Cambodia
2	CHOUN Pheakdey	M	2024	HEIP-2	No		Thermal Performance Evaluation and Optimization of Residential Building Stocks: A Study on Topology, Construction Materials, and Passive Cooling Strategies
3	NEOV Yoklin	F	2024	HEIP-2	No		Investigating the Application of Reinforcement Learning in Adaptive Hybrid Microgrid Protection: A case study in Cambodia
4	NOP Phornnara	M	2024	EDC-AFD-EU	No		Regional Area Distribution Networks Reconfiguration and Planning for Power Quality Optimization and Revenue Loss Reduction
5	YON Kanika	F	2024	EDC-AFD-EU	Yes	Grenoble INP	Contingency Analysis with Variable Renewable Energy and Energy Storage Systems - Case Study in Cambodia
6	LENG Por	M	2023	EDC-AFD-EU	No		Power Management and Control of Hybrid LV AC/DC Microgrids with Renewable Energy Sources and Battery Energy Storage
7	SORN Darong	M	2023	EDC-AFD-EU	Yes	Université Grenoble Alpes	Operation and Protection Strategies for Low Voltage Hybrid Grids: Enhancing Efficiency, Reliability, and Resilience
8	CHHLONH Chhith	M	2021	BGF-HEIP	Yes	Université Grenoble Alpes	Optimal fault location, isolation, and restoration procedure for LV microgrids
9	NEAK Kimhak	M	2021	HEIP-ITC	No		The impacts Assessment of Gasoline and Diesel Quality in Cambodian Fuel Market on Economic and Environment
10	CHHENG Monyvathna	M	2021	HEIP	No		Design and Techno-economic analysis of plug-in electric vehicle-integrated Hybrid solar PV charging system for Cambodia

11	HEANG Latin	M	2020	CCCA	No		Study on impact of heat stress on construction worker's productivity and economic in Cambodia
12	CHEA Vabotra	M	2020	MoE	No		Study on the Impact of Heat Stress on Garment Worker Productivity and Economy in Cambodia
13	MEAS Saran	M	2020	NPIC	No		Optimization of an Integrated Hybrid Onboard Charger with High Efficiency of MPPT Solar Charger for 3-Wheel Solar E-Rickshaw and Electric Vehicles
14	SIO Sreymean	F	2019	HEIP-ITC	No		Applied geophysical methods for geological structures and hydrocarbon potential investigation in Kampong Som Basin, Onshore of Cambodia
15	ETH Oudaya	M	2019	HEIP-ITC	No		Study on Impacts of the Integration of Renewable Energy Resources on Distribution System considering Micro Grid Scenario

Lecturers and Supervisors

This program involves over 8 faculty members whose specializations are in new and renewable energy, energy efficiency and conservation, smart grid, energy management and relevant fields. All of them hold doctoral degrees from Europe, Japan, Korea, and ASEAN. They are involving in the program for teaching or/and supervising the D-ETM students. Some students are jointly supervised by professors from partner universities. The list of faculty members in D-ETM program can be found in Annex 8 or on the website of GS-ITC.

Thesis and publication

Five theses have been published since the academic year 2021-2022. The list of published theses can be found in Annex 9 and on the website of GS-ITC.

Regarding the dissemination and publication, 8 articles were published in international journals. The list of publications is presented in Annex 10 in the webpage of GS-ITC.

3.3.4.4. Program D-FTN

Program's Objective

D-FTN, in conjunction with the Research Unit of Food Technology and Nutrition under RIC-ITC, is one of the five doctoral programs of ITC, established in 2017, recognized by the Ministry of Education Youths and Sports. D-FTN was developed by the relevant experts in Food Science, Food Engineering, Food Technology and Nutrition including the lecturers and researchers at ITC with the support from partner universities and institutions. Students can register for a single degree at ITC, or a degree under cotutelle (co-supervision) between ITC and a partner university in France. The cotutelle program is selective and upon the agreement between ITC and the partner university.

D-FTN students will develop in-depth understanding of the key technologies and engineering in their research area of Food Science, Food Engineering, Food Technology and Nutrition. D-FTN students will work closely with researchers of FTN research unit (generally, one of them is the student's supervisor) and they also can be co-supervised by the professors from our partner universities or research institutions (France, Belgium, Japan, etc.).

Curriculum and syllabus

D-FTN is a full-time program (3 to 6 years), consist of 54 credits: 21 credits for coursework (Supplementary/Prerequisite and Doctoral courses, and PhD Orientation courses), and 33 credits for research and thesis (3 credits for detailed research proposal, 6 credits for national/international publications, 3 credits for the presentation in scientific conference, 3 credits for seminars, 18 credits for Thesis writing and defense). This program trains doctoral students to be specialized in their respective advanced research and development field such as Food technology development, Food processing and engineering, Food product development, Food quality and safety, Sustainability of food systems, Food contaminant surveillance and control and other relevant fields. Detailed curriculum can be found on the website of GS-ITC.

Students and Alumni

Starting from the academic year 2017-2018 to 2023-2024, seven students (4 females) have graduated from the program. En 2024-2025, there are no new students enrolling in the program and the details are reported in the table below. The list of current and graduated students including their including research topic can be found on the website of GS-ITC.

List of current D-FTN students in 2024-2025

No.	Name	Sex	First Reg.	Funding	Cotutelle		Research topic
					Yes/ No	University	
1	LAY Sovannmony	M	2022	ARES-CAMBOFISH	Yes	Université Catholique de Louvain	Effects of different smoking and cooking conditions on the fatty acid profile of farmed freshwater fish marketed in Cambodia
2	MOM Vattana	F	2022	ARES-CAMBOFISH	Yes	Université de Liège	Improvement the safety of processed fish farm products
3	OEUM Kakada	F	2021	IRD	Yes	University of Montpellier	Exploration and exploitation of root-associated bacteria for a sustainable rice agriculture in Cambodia
4	MAO Socheata	F	2021	ITC-Erasmus+/HEIP	Yes	Agro-Sup Dijon	Lactic Acid Bacteria Strain Diversity Depending on the Origin of the Product
5	SAY Manit	M	2021	HEIP	No		Development of cooking oil processes for commercialization
6	PHAL Sivchheng	F	2021	BGF-ITC	Yes	INSA Toulouse	New insights into Pharmaceuticals and Personal Care Products (PPCPs) removal from waters
7	CHIN Lyda	F	2021	BGF-ITC/HEIP	Yes	Montpellier SupAgro	Impact of initial compositions and processing techniques on aromatic quality of Mango

8	THANH Channmuny	F	2021	BGF-ITC/HEIP	Yes	Montpellier SupAgro	Nutritional Interest of Different Fish Species and Valorization of By-Products
9	LY Luka	M	2020	HEIP	No		Control of Different Soy Sauces Sold in the Markets and the Development of Soy Sauce Fermentation Process

Lecturers and Supervisors

This program involves over 6 faculty members whose specializations are in Food technology development, Food processing and engineering, Food product development, Food quality and safety, Sustainability of food systems, Food contaminant surveillance and control and other relevant fields. They hold doctoral degrees from Europe, Japan, US, or ASEAN. They are involving in the program for teaching or/and supervising the D-FTN students. Some students are jointly supervised by professors from partner universities. The list of faculty members in D-FTN program can be found in Annex 8 or on the website of GS-ITC.

Thesis and publication

Seven theses have published since the academic years 2020-2021. The list of published theses can be found in Annex 9 and the website of GS-ITC.

Regarding the dissemination and publication, 10 articles were published in international journals. The list of theses and publication are presented in the webpage of graduate school: The list of publications is presented in Annex 10 in the webpage of GS-ITC.

3.3.4.5. Program D-MIT

Program's Objective

D-MIT, in conjunction with the Research Unit of Mechatronics and Information Technology under RIC-ITC, is one of the five doctoral programs of ITC, established in 2017, recognized by the Ministry of Education Youths and Sports. D-MIT was developed by the relevant experts in Mechanical engineering, robotics, electronics and automation, information and technology including the lecturers and researchers at ITC with the support from partner universities and institutions. Students can register for a single degree at ITC, or a degree under cotutelle (co-supervision) between ITC and a partner university in France and in Belgium. The cotutelle program is selective and upon the agreement between ITC and the partner university.

D-MIT students will develop in-depth understanding of the key technologies and engineering in their research area of mechanical engineering, robotics, electronics and automation, information and technology, data science, computer vision and other related fields. D-MIT students will work closely with researchers of MIT research unit (generally, one of them is the student's supervisor) and they also can be co-supervised by the professors from our partner universities or research institutions (France, Belgium, Japan, etc.).

Curriculum and syllabus

D-MIT is a full-time program (3 to 6 years), consist of 54 credits: 21 credits for coursework (Supplementary/Prerequisite and Doctoral courses, and PhD Orientation courses), and 33 credits for research and thesis (3 credits for detailed research proposal, 6 credits for national/international

publications, 3 credits for the presentation in scientific conference, 3 credits for seminars, 18 credits for Thesis writing and defense). This program trains doctoral students to be specialized in their respective advanced research and development field such as intelligent mechatronics, artificial intelligence, telecommunication and internet of things, optimization for operation research and supply chain, electronics, and communication and other relevant fields. Detailed curriculum can be found on the website of GS-ITC.

Students and Alumni

Starting from the academic year 2017-2018 to 2023-2024, six students (0 female) have graduated from the program. Currently, there are 3 new students enrolling in the program and the details are reported in the table below. The list of current and graduated students including their including research topic can be found on the website of GS-ITC.

List of current D-MIT students in 2024-2025

No.	Name	Sex	First Reg.	Funding	Cotutelle		Research topic
					Yes/ No	University	
1	EM Hengly	M	2024	ARES-ITC	Yes	University of Mons	Enhancing Sleep Apnea Diagnosis with Latent Space Shaping and Explainable AI for Biomarker Extraction
2	LY Tong	M	2024	RAC	No		Developing Framework for Predicting University Students' Academic Performance in STEM Majors Using Machine Learning and AI
3	PEN Chentra	M	2024	ITC	No		Applying Artificial Intelligence to early empower students performance academic in blended learning
4	NGIN Kimlong	M	2023	UHST and ITC	No		S3AT: Attendance Tracking System based on AI Integrated with Electronic Device for Security Alarm
5	CHIN Chan Daraly	M	2022	BGF-ITC	Yes	Toulouse INP	The vehicle as an intelligent thing
6	SRENG Vichet	M	2022	NUM	No		Automatic License plate number recognition system for Vehicle in Cambodia (ALPR)
7	PICH Reatrey	M	2021	ARES-ITC-HEIP	Yes	Université de Namur	Anomaly Detection in networks based on DNS's data analysis
8	BUN Menghorng	M	2021	HEIP	Yes	Toulouse INP	Study of feasibility and control of solar electric tuktuk
9	SOK Song	M	2020	HEIP-NUBB	No		Development of Non-Intrusive Appliance Load Monitoring and Diagnostic System for Residential Home
10	KARTHIKEYAN Dinesh Kumar	M	2020	KIT-ITC	No		Image or Video Visualization of Text (Book) using Generative Adversarial Networks (GAN) / Educational GAN(EduGAN)

11	CHHOUR Vongchivorn	M	2020	NPIC	No		Parameter estimation for actuator using Kalman filter
12	PEOU Thura	M	2020	NPIC	No		System integration for autonomous navigation for mobile robots using deep learning and ROS
13	SREY Sophyn	M	2020	NPIC	No		State and parameter estimation, and flight control for Unmanned Aerial Vehicle (UAV)
14	THUOK David	M	2020	NPIC	No		Optimization for multi agent in system integrity protection
15	UN Sok Oeun	M	2020	NPIC	No		Cambodia disaster back-up communication for natural disaster by emergency amateur radio operator
16	YEAN Sopheak	M	2020	NPIC	No		Parameter Identification and Automatic Control for a System with Friction
17	KUY Movsun	M	2020	ARES	Yes	Université de Mons	Automatic security assessment of IoT devices using machine learning
18	HEAN Samboeun	M	2018	NIPTIC	No		Research & development mathematical model as a machine learning system for Cambodia's digital economy
19	SIV Ratha	M	2018	ARES-ITC	Yes	Université de Mons	Crowds Analysis and Augmentation
20	SOK Kim Heng	M	2018	ARES-ITC	Yes	Université de Namur	Building trustable and privacy aware IoT systems using blockchain and smart contracts

Lecturers and Supervisors

This program involves over 8 faculty members whose specializations are in mechatronics, electronic and automation engineering, data science, robotics, and relevant fields. They hold doctoral degrees from Europe, Japan, or ASEAN. They are involving in the program for teaching or/and supervising the D-MIT students. Some students are jointly supervised by professors from partner universities. The list of faculty members in D-MIT program can be found in Annex 8 or on the website of GS-ITC.

Theses and publications

Six theses have been published since the academic year 2020-2021. The list of published theses can be found in Annex 9 and the website of GS-ITC.

Regarding the dissemination and publication, 15 articles were published in international journals. The list of theses and publication are presented in the webpage of graduate school: The list of publications is presented in Annex 10 in the webpage of GS-ITC.

3.3.4.6. Program D-MSS

Program's Objective

D-MSS, in conjunction with the Research Unit of Materials Science and Structure (MSS) under RIC-ITC, is one of the five doctoral programs of ITC, established in 2017, recognized by the Ministry of Education Youths and Sports. D-MSS was developed by the relevant experts in material science, structural engineering, mechanical engineering, and related fields including the lecturers and researchers at ITC with the support from partner universities and institutions. Students can register for a single degree at ITC, or a degree under cotutelle (co-supervision) between ITC and a partner university in France. The cotutelle program is selective and upon the agreement between ITC and the partner university.

D-MSS students will develop in-depth understanding of the key technologies and engineering in their research area of material science and engineering, structural engineering, polymer composites, failure analysis of steel structure and other materials, numerical modeling and experimental analysis of infrastructure and materials. D-MSS students will work closely with researchers of MSS research unit (generally, one of them is the student's supervisor) and they also can be co-supervised by the professors from our partner universities or research institutions (France, Belgium, Japan, etc.).

Curriculum and syllabus

D-MSS is a full-time program (3 to 6 years), consist of 54 credits: 21 credits for coursework (Supplementary/Prerequisite and Doctoral courses, and PhD Orientation courses), and 33 credits for research and thesis (3 credits for detailed research proposal, 6 credits for national/international publications, 3 credits for the presentation in scientific conference, 3 credits for seminars, 18 credits for Thesis writing and defense). This program trains doctoral students to be specialized in their respective advanced research and development field such as material science and engineering, structural engineering, polymer composites, failure analysis of steel structure and other materials, numerical modeling and experimental analysis of infrastructure and materials and other relevant fields. Detailed curriculum can be found on the website of GS-ITC.

Students and Alumni

Starting from the academic year 2017-2018 to 2023-2024, six students (3 female) have graduated from the program. In 2024-2025, there are 3 new students (1 female) enrolling in the program and the details are reported in the table below. The list of current and graduated students including their including research topic can be found on the website of GS-ITC.

List of current D-MSS students in 2024-2025

No.	Name	Sex	First Reg.	Funding	Cotutelle		Research topic
					Yes /No	University	
1	AUN Srean	F	2024	BGF	Yes	Université de Rennes	Hybrid coatings for the Photodynamic inactivation of microbial infections
2	CHANN Socheata	M	2024	Eiffel	Yes	INSA Rennes	Experimental and numerical studies of the behavior and durability of foam concrete base on recycled glass and natural fibers

3	NUTH Visal	M	2024	BGF	Yes	Université de Lorraine	Climate-Resilient Soil Stabilization in Cambodia: Adapting to the Challenges of Flooding and Seasonal Variations
4	PLACK Sokhit	M	2023	ITC	No		Walkability and importance assessment of pedestrian facilities in Phnom Penh City
5	SOM Chansamnang	M	2023	BGF	Yes	INSA Rennes	Effect of the addition of natural fibers on shrinkage, cracking risk and healing capacity of cementitious materials
6	HENG Muoy Yi	F	2022	HEIP	Yes	Université de Liège	Quality assurance of concrete pile integrity using Non-destructive method
7	HENG Kimhong	M	2021	HEIP	Yes	Uni. de Rennes 1	A study of high strength-to-weight ratio glass beam
8	LONG Makara	M	2021	ARES-ITC	Yes	Université de Liège	Sustainable design conception integrated in architecture project in BIM environment
9	KETH Kannary	F	2020	ARES-COMBOdIA	Yes	Université Libre de Bruxelles	Managing the interdisciplinary collaboration in Construction 4.0: ITC case
10	TAING Kimninh	F	2020	ARES-COMBOdIA	Yes	Université de Liège	Green BIM – Analysis of BIM approach for design a bioclimatic building
11	HOUR Sokaon	M	2020	NPIC	No		FEM to Predict Effects of Plastic Deformation on Mechanical Properties of a Structural Steel
12	KEAT Rayuth	M	2020	NPIC	No		Study on Furnace Glass Heat Treatment Technology

Lecturers and Supervisors

This program involves over 12 faculty members whose specializations are material science and engineering, structural engineering, polymer composites, failure analysis of steel structure and other materials, numerical modeling and experimental analysis of infrastructure and materials, and relevant fields. They hold doctoral degrees from Europe, Japan, or ASEAN. They are involving in the program for teaching or/and supervising the D-MSS students. Some students are jointly supervised by professors from partner universities. The list of faculty members in D-MSS program can be found in Annex 8 or on the website of GS-ITC.

Theses and publications

Six theses have been published since the academic year 2021-2022. The list of published theses can be found in Annex 9 or on the website of GS-ITC.

Regarding the dissemination and publication, 6 articles were published in international journals. The list of publications is presented in Annex 10 in the on the website of GS-ITC.

3.3.5. Challenges

(1) Both numbers of Master and PhD graduates in the academic year 2023-2024 were achieved lower than the expected target numbers, mainly due to the delay of publication requirements in both training levels. In current estimate, it takes more than 1.5 years complete Master's degree and more than 3.5 years to complete doctoral degree. To improve this situation, more supports and seminar on scientific paper writing will be provided.

(2) On the other hand, despite increasing, the number of new recruitments for 2024-2025 was still not achievable at the target for Master's degree programs (only 93% of the target was achieved). To improve this point, we will do more communications, especially between ITC and stakeholders, about our programs and consider developing blended learning programs in the form of module-based programs (developing more e-learning courses so that students can relax physical presences at school). In so doing, we can enable more bachelor's holders already employed to take part in the programs.

(3) Our current programs, both at Master and PhD levels, seem incapable to address sufficiently on entrepreneurship and business skills that enable students' readiness to become entrepreneurs after graduating. To address this issue, improving entrepreneurship axis in our programs will be reviewed.

3.3.6. Conclusion

For this academic year, 8 full-time master programs are operated (with 8 research-based programs). The number of enrollments in academic year 2024-2025 increased by 12%, compared with academic year 2023-2024, yet was 9% lower the target. Around 44% of our master students are scholarship recipients (full or partial scholarships). Number of students mobilities increased from 16 to 22, in 5 programs. There are in total 463 Master graduates (119 females) from our 8 masters' programs. In this number, 52 Master graduates (13 females) in the academic year 2023-2024.

To promote our master programs and attract more students, we will increase our communications, especially between ITC and relevant stakeholders, about our programs and consider developing blended learning programs in the form of module-based programs.

For doctoral programs, for the academic year 2024-2025, there are 57 students (17 females) enrolled in the 5 fields. Among these, 26 (12 females) doctoral students registered in cotutelle programs with French and Belgian partner universities. In total, 28 students obtained their doctoral degrees (18 double-degree students), 4 students in 2020-2021, 8 students in 2021-2022, 7 students in 2022-2023 and 9 students in 2023-2024. To promote our doctoral programs, "*Thèse CIFRE*" style programs should be implemented and collaboration with private sectors is important. Our existing Master's and PhD programs do not adequately prepare students with the entrepreneurship and business skills necessary for them to become entrepreneurs after graduation. To tackle this challenge, we will evaluate and enhance the entrepreneurship component of our programs by seeking joint project proposal with our partners.

4. Capacity Building and Professor Dispatch

4.1. Capacity Building (2024-2025)

4.1.1. Long-term overseas capacity building for lecturers and students

Master's and doctoral education are now a strategic lever for building the future. It is not limited to acquiring knowledge: it shapes innovative minds capable of addressing the major scientific, technological, and socioeconomic challenges of our time. These programs also play a central role in building bridges between universities, research centers, and the business world, thus stimulating innovation, competitiveness, and international influence.

The Institute of Technology of Cambodia (ITC) fully embodies this dynamic. For the 2024-2025 academic year, the ITC is mobilizing 154 teachers and students, including 16 doctoral students, 1 master's degree, and 1 postdoctoral fellow for teachers. At the same time, 136 students are pursuing this postgraduate program: 128 master's degrees, 6 doctoral students, and 2 researchers. Significantly, these talented individuals are spread across partner institutions located around the globe, demonstrating the ITC's international outlook and commitment to high-level scientific training. For more information, please see Annex 11 and 12.

4.1.2. Short-term overseas capacity building for lecturers and students

Short-term overseas development missions play a key role in strengthening teachers' pedagogical capacities. They provide a valuable opportunity to explore new teaching methods, adopt innovative educational practices, and draw inspiration from the most effective approaches used internationally. These experiences also allow teachers to stay at the forefront of knowledge in their field, whether it be scientific advances, educational trends, or emerging technologies. In turn, this results in more dynamic teaching that is better adapted to the needs of learners, promoting their academic success.

For students, these trips abroad represent much more than just an academic experience. They constitute a true cultural immersion, fostering open-mindedness, intercultural understanding, and personal enrichment. This exposure to diverse educational contexts develops their ability to interact in a multicultural environment, an essential skill in an increasingly globalized world.

For the 2024-2025 academic year, the Institute of Technology of Cambodia (ITC) is distinguished by its strong international mobility: 109 overseas assignments are scheduled for lecturers and 65 for students, demonstrating the institution's ongoing commitment to excellence, innovation, and openness to the world. For more information, please see Annex 13 and 14.

4.2. Professor dispatch at ITC (2024-2025)

The presence of foreign professors within a university is a real asset for open-mindedness, academic innovation, and the continuous improvement of teaching quality. At ITC, these international professors bring different worldviews, diverse pedagogical approaches, and enriching experiences. Their contribution energizes course content, stimulates students' critical thinking, and fosters an internationally oriented learning culture.

This dynamic is fully in line with the internationalization of higher education, enabling ITC not only to strengthen its academic reputation but also to attract international students. It thus prepares Cambodian students to thrive in a globalized, multicultural, and competitive professional environment.

In terms of developing academic networks, international professors also play a strategic role. Through their connections with other universities and research centers, they facilitate the emergence of collaborations, academic exchanges, and scientific projects with international scope. For the 2024-2025 academic year, ITC welcomed 34 international faculty members on teaching assignments, demonstrating its continued commitment to academic excellence and research.

For more information, please refer to Annex 15.

5. Research and Innovation Center

5.1. Overview

The Research and Innovation Center (RIC) at the Institute of Technology of Cambodia (ITC), established in 2015, plays a pivotal role in promoting research excellence and innovation within the university. To streamline research activities and foster industry collaborations, RIC oversees five specialized research units:

- Energy Technology and Management (ETM)
- Food Technology and Nutrition (FTN)
- Mechatronics and Information Technology (MIT)
- Material Science and Structure (MSS)
- Water and Environment (WAE)

More detailed information on the research vision and mission, focus areas, outputs, and collaborations of each research unit is provided in Annexes 16 to 20.

RIC coordinates regular meetings—monthly at the unit level, quarterly involving the RIC management team, and semi-annually with all research staff—to review progress, discuss new initiatives, and resolve challenges. These structured engagements ensure continuous assessment and guidance, driving research productivity and innovation across ITC.

This section specifically highlights research activities and innovations conducted during the 2024-2025 academic year and serves as an essential reporting tool to ITC’s International Consortium.

5.2. Research Performance & Key Metrics

5.2.1. Research Fund

In 2024-2025, ITC researchers submitted a total of 43 research proposals (detailed in Annexes 21 to 25) to various funding agencies, including the second phase of LBE (INACON), USAID, MoEYS, SEA-Europe, and the second phase of HEIP.

Out of these submissions, ITC successfully secured funding for 27 projects (Annexes 21 to 25). The budget for academic year 2024-2025 for research units is shown in Figure below. It also shows the total budget of new projects in research research unit. FTN and WAE received almost same amount of grant.

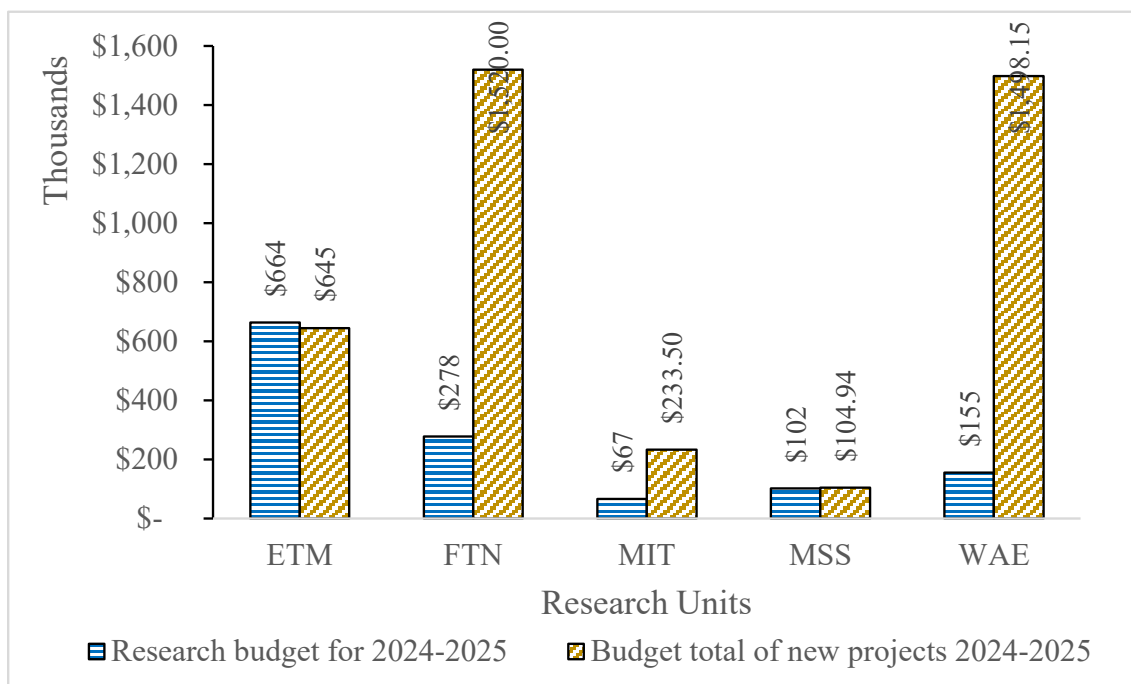


Figure 13. Research budget for 2024-2025 and budget total of new projects 2024-2025.

5.2.2. On-going Research Projects

In the 2024-2025 academic year, 112 researchers are actively engaged in 52 ongoing research projects (Annexes 26-30), with 38% of them being female. These projects span across five research units.

- Energy Technology and Management (ETM) – 5 projects (Annex 26) involving 19 researchers: 13 Senior Researchers, 2 Lecturer-Researchers, and 4 Full-Time Researchers.
- Food Technology and Nutrition (FTN) – 9 projects (Annex 27) with 26 researchers: 10 Senior Researchers, 6 Lecturer-Researchers, and 10 Full-Time Researchers.
- Mechatronics and Information Technology (MIT) – 9 projects (Annex 28) supported by 23 researchers: 10 Senior Researchers, 7 Lecturer-Researchers, and 6 Full-Time Researchers.
- Material Sciences and Structure (MSS) – 11 projects (Annex 29) conducted by 17 researchers: 10 Senior Researchers, 0 Lecturer-Researchers, and 7 Full-Time Researchers.
- Water and Environment (WAE) – 18 projects (Annex 30) led by 27 researchers: 11 Senior Researchers, 8 Lecturer-Researchers, and 8 Full-Time Researchers.

Figure 14 illustrates the distribution of research projects and researchers across the five research units. ETM has a relatively low number of projects compared to its researchers, while WAE leads with the highest number of projects.

Out of 43 research proposals (Annexes 36-40), 27 were awarded as new projects (Figure 15), while 40 projects (Annexes 31-35) were completed during this academic year.

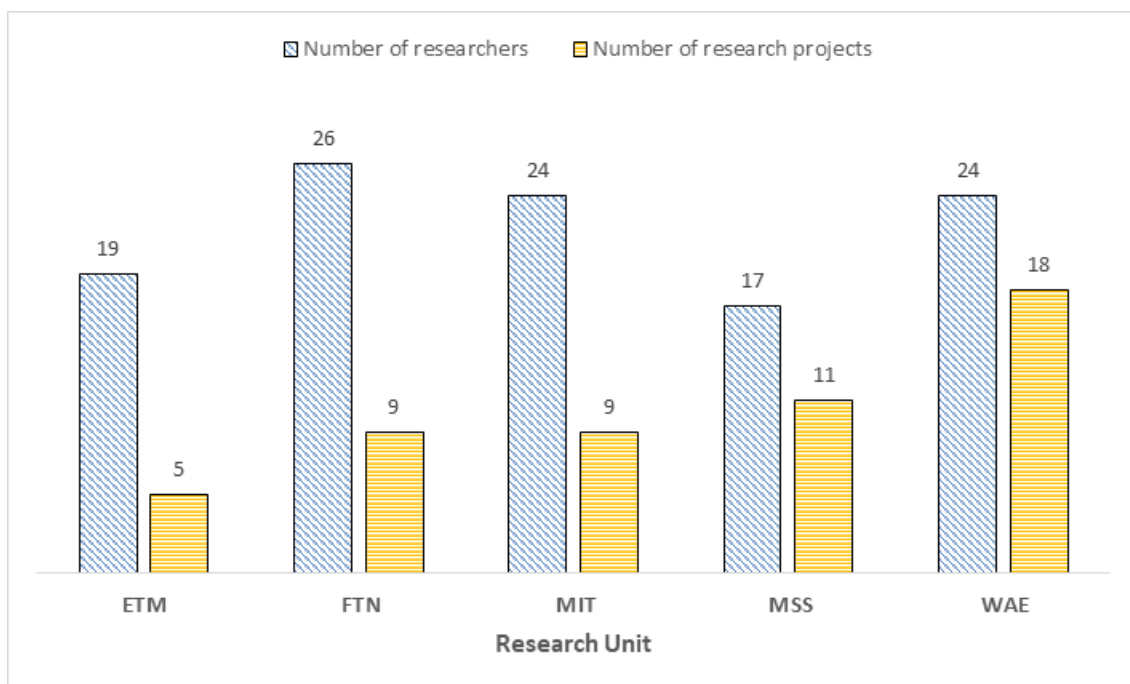


Figure 14. Research projects by each research unit (2024-2025).

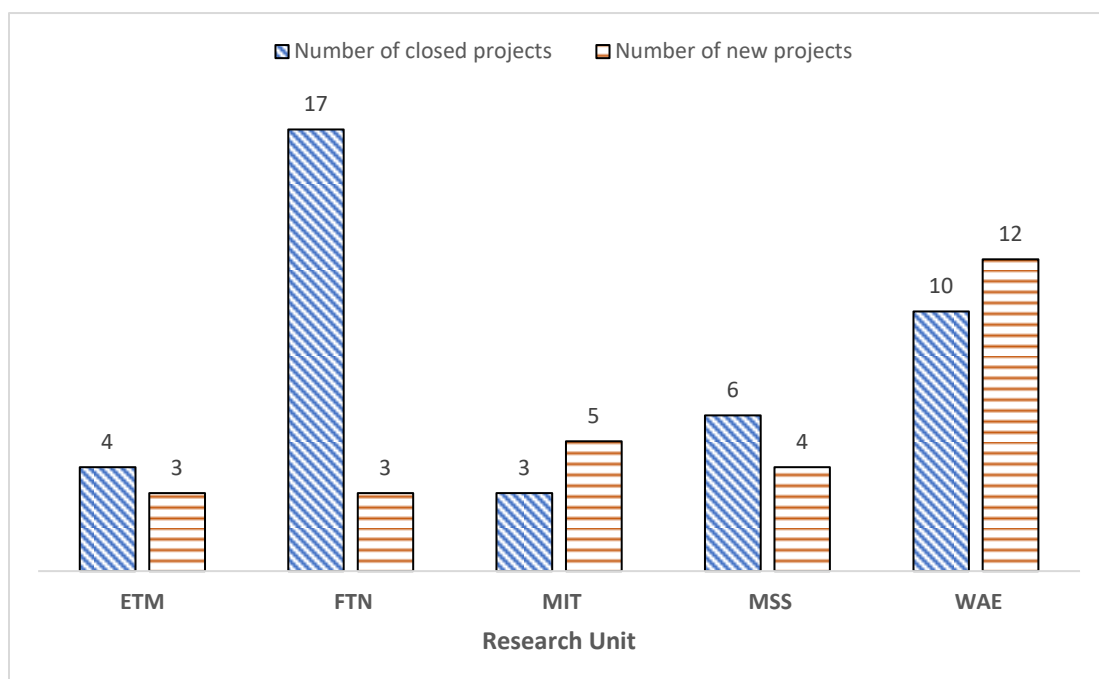


Figure 15. Number of completed and new projects in 2024-2025.

Research activities at ITC are conducted with funding and collaborations from international and national institutions, including:

- Belgium: ARES-CCD
- France: AFD, AgroSup Dijon, AUF, Ambassade de France, INSA de Rennes, Pierre Fable, Research Institute of Development (IRD)

- Japan: JST/JICA, AUN/Seed-Net JICA, JSPS, Kanazawa University, Takashi Foundation, Kurita Foundation
- Cambodia: Cambodia Climate Change Alliance (CCCA), CDRI, HEIP2, GGGI
- Australia: ACIAR
- United States: US Air Force
- United Kingdom: UK Trust Fund

5.2.3. Research Publication

In terms of research output, during the period 2024-2025, ITC researchers published a total of **41** research articles in peer-reviewed journals, including both indexed (international journals) and non-indexed publications (local journals and ITC's Techno-Science Research Journal) as shown in Figure 16. A detailed breakdown of these publications is provided in Annexes 41 to 45 for the last five years.

Additionally, ITC researchers actively disseminated their findings through presentations at over 200 national and international conferences and scientific events.

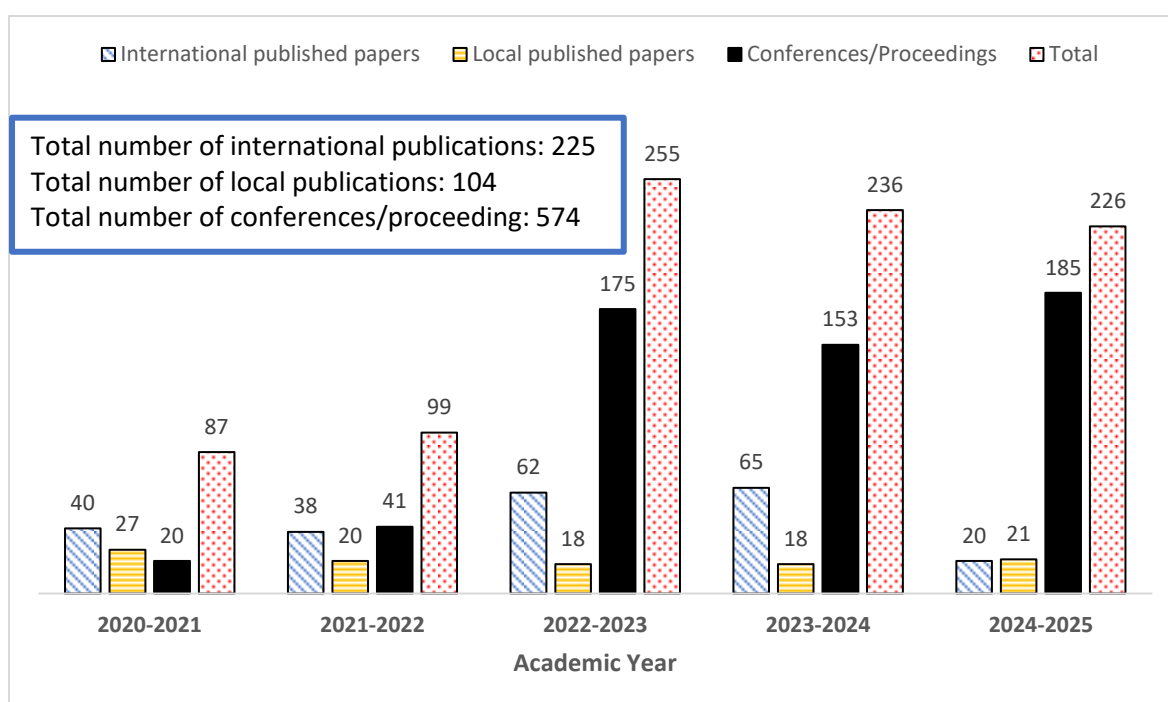


Figure 16. Number of publications in last 5 years.

ITC's Techno-Science Research Journal

The Techno-Science Research Journal (Techno-SRJ), published by ITC's Research and Innovation Centre (RIC) since 2013, is a peer-reviewed journal dedicated to disseminating research in applied sciences and engineering. The journal covers diverse fields such as environmental science, food technology, geotechnical engineering, electrical engineering, mechanical engineering, informatics, civil engineering, transportation, and data science.

By December 2024, Techno-SRJ has published 160 research papers across 16 issues (12 volumes). Research findings from these papers have also been presented at national and international conferences, and all publications are available on the journal's online platform.





- ISSN: 3006-4988
- E-ISSN: 3006-4996
- Website: <http://techno-srj.itc.edu.kh/>



RIC applied for inclusion in the ASEAN Citation Index (ACI) in February 2024, with a re-application planned for 2026 after addressing suggested improvements.





In 2025, for Volume 13, we planned to publish 3 issues. We have already published 1 issue in April, featuring 10 papers, and will include a special issue from the 14th scientific conference proceedings. (see details in Annex 46).

5.2.4. Research Impact

The Research and Innovation Center (RIC) at ITC demonstrated significant research impact in the academic year 2024-2025 across diverse areas, summarized as follows:

<i>Description</i>	<i>Research Unit</i>	<i>Remark</i>
<i>Prototype Development</i>		
Energy Efficient Biomass Briquette (EFBB) is nearing commercialization, with clearly defined properties and optimized production methods, offering high energy density, easy ignition, and stable heat distribution. It received the Silver Award from The Hitachi Global Foundation Asia Innovation Award 2023.	ETM	
The eco-friendly pavement blocks utilize recycled glass and coconut husk fiber to reduce carbon footprint and waste. They are customizable in shape and size to suit diverse construction applications.	MSS	
Eco-friendly Glass Mortar Block made entirely from recycled glass waste replaces traditional cement completely. It combines local glass powder, alkali activator, and sand, ideal for eco-friendly souvenir products.	MSS	
Enhanced punching blades were developed using medium carbon steel with an advanced boronizing treatment, significantly improving hardness, durability, and operational lifespan for local SMEs.	MSS	

Eco-Friendly Microplastic Removal Filter (EMRF) effectively removes microplastics from seawater in salt production, using locally sourced biodegradable materials, thereby enhancing sea salt quality and promoting sustainability and community health.	WAE	
Technology Transfer & Industry Support		
Freshwater Fish Powder Production: Supporting Danish Care Foods in developing fish powder for versatile use in Cambodian diets.	FTN	
Dried Fish Quality Improvement: Assisting Samnang Sothea dried fish enterprise in upgrading drying technology for improved product quality.	FTN	
Instant Fish Soup Development: Collaborating with Heng Channy Angkor Meas Co., Ltd. to create market-ready instant fish soup recipes.	FTN	
Nutrient-Dense Waffle Rolls for Children: Enhancing Danish Care Foods' product line by incorporating Cambodian freshwater fish powder.	FTN	
Fish Jerky Shelf-life Extension: Partnering with UNICA Enterprise to develop ready-to-eat fish jerky with improved shelf life.	FTN	
Oyster Sauce Commercialization: Assisting Phnom Pich Bunkhea Fish Sauce Enterprise in producing oyster sauce from Cambodian oysters and green mussels.	FTN	
Smoked Fish Safety & Quality Improvement: Conducting a health risk assessment for Home Taste Food to enhance smoked catfish production.	FTN	
Fermented Pangasius Fish Market Expansion: Helping Ey Pov Enterprise improve the quality, safety, and shelf-life of fermented Pangasius fish for new markets.	FTN	
Green Mussel Processing Research: Supporting a mussel processing enterprise in optimizing steam conditions to improve the organoleptic quality and safety of steamed mussels.	FTN	
Feasibility Study of Siem Reap's Prahok Toward Geographical Indication: This study identifies key microbial communities in traditional prahok production, analyzing the unique taste and flavor profiles from Siem Reap and Battambang provinces, supporting its potential recognition as a Geographical Indication (GI) product.	FTN	
This research, supported by Fyfe Asia Pte, Ltd, Singapore, focuses on the performance of different types of Fiber-Reinforced Polymer (FRP) anchors, including variations in diameter, embedment depth, and strengthening capacity.	MSS	
Policy Influence through Research		
Cooling Homes – Innovative & Low-Impact Living ("Chill Project"): This project promotes sustainable cooling solutions	ETM	

for residential buildings in Cambodia, aligning with the National Energy Efficiency Policy (NEEP) and the National Cooling Action Plan. It focuses on retrofitting homes to improve thermal comfort, energy efficiency, and climate resilience, while minimizing environmental impact.		
Capacity for Cambodia Energy Efficiency (CapCEE Project): A key initiative supporting Cambodia's NEEP, this project strengthens technical expertise in energy efficiency through capacity building and the establishment of a Certified Training Program. It emphasizes long-term sustainability and industry-wide adoption of energy-efficient practices.	ETM	 
Land Cover and Litho-Mineral Alteration Analysis: This study examines Land Use and Land Cover (LULC) changes in the Chrey Bak Catchment using advanced satellite imagery (Sentinel-2, Landsat-8, and ASTER). Findings indicate a significant decline in forest and vegetation cover due to cropland expansion and urbanization, impacting soil quality and ecosystem balance. The research provides critical data for land management policies and sustainable resource planning.	WAE	
<i>Social Impact and Community Development</i>		
Low Carbon Building Training Program: This program enhances the skills of government officials, material manufacturers, architects, developers, contractors, building owners, energy auditors, ESCOs, and financial institutions, strengthening national capacity in sustainable construction and energy-efficient building practices.	ETM	
FEF-Healthyrice: Promoting Integrated Disease Management and Sustainable Quality of Fragrant Rice - This initiative focuses on developing sustainable agricultural practices to ensure consistent aroma production in fragrant rice. It strengthens analytical capabilities for assessing microbiological, nutritional, aromatic, and pesticide content in rice. Additionally, the program provides education and training for students and researchers through fieldwork, laboratory schools, and graduate research programs.	FTN	
LMI LEAD: Sustainable Rice-Based Agroecosystems - This collaborative initiative promotes agricultural diversification to enhance the sustainability of rice-based food systems in Cambodia. It focuses on reducing environmental pollution, particularly from pesticides, while improving water resource management and increasing agrobiodiversity for more resilient farming systems. The project also supports the One Health approach by integrating human, animal, and environmental health and contributes to improving food security through sustainable farming practices.	FTN	
Agroecology Transition in Agriculture: Research findings on agroecological practices were shared in the ALISEA Online Thematic Workshop (24 December 2024), focusing on soil resilience and sustainable agriculture. The workshop engaged 30 participants, including cooperative farmers and NGOs working in agricultural development.	WAE	

5.3. Research Capabilities

5.3.1. Researchers

In the 2024-2025 academic year, ITC employed 110 researchers (38% Female), including those holding administrative positions who also engage in research, categorized as senior researchers. The distribution of researchers across senior researchers, lecturer-researchers, and full-time researchers is illustrated in Figure 17.

The number of active research projects has declined by nearly 50%, with only 52 projects remaining in 2024-25 (Annexes 26-30). This decrease is attributed to the classification of projects completed in 2024 as finished projects (Annexes 31-35). Figure 18 provides a comparative overview of researchers and research projects over the past 5 academic years, starting from 2020-21.

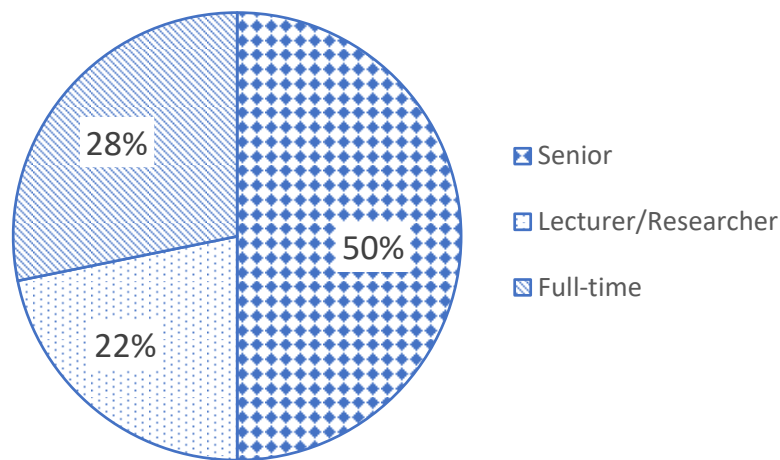


Figure 17. Percentage of category of researchers

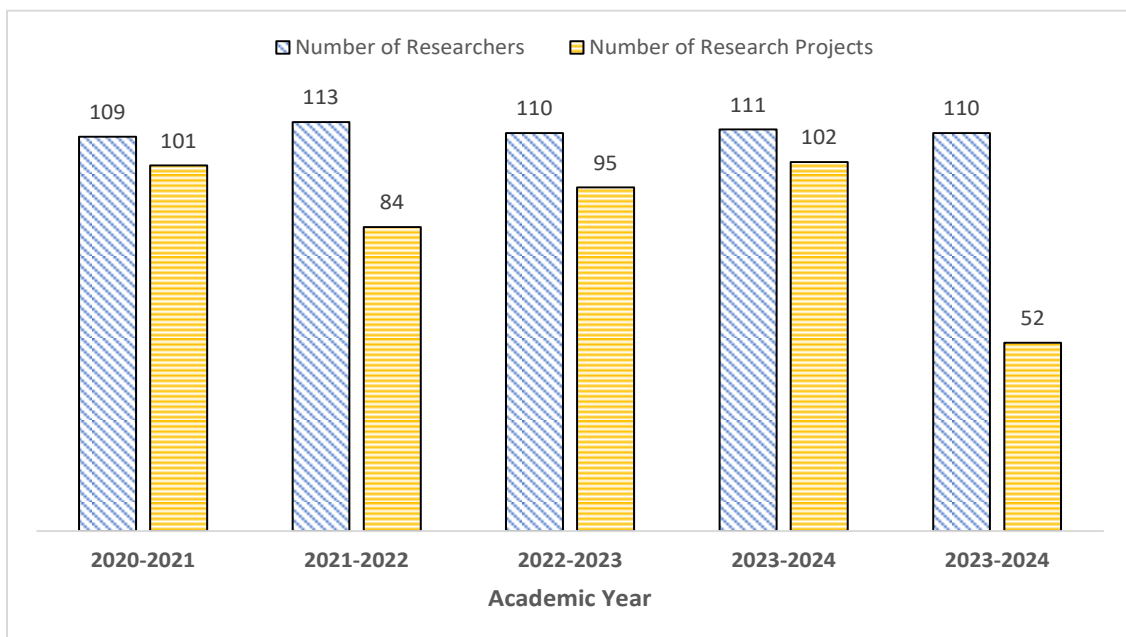


Figure 18. Number of researchers and research projects in last 5 years.

5.3.2. Research Facilities

The Research and Innovation Center (RIC) at ITC maintains robust research infrastructure supported through ongoing national and international collaborations. Over recent years, ITC has significantly enhanced its research capability through strategic equipment investments funded by the Government and different partners.

Currently, RIC hosts a comprehensive network of 38 specialized research laboratories, each supporting diverse fields of scientific and technological inquiry. These labs facilitate high-quality research, industry collaboration, and practical teaching activities, reflecting RIC's capability to sustain impactful research despite no major equipment upgrades during the reporting year.

Research unit	Name of laboratory
ETM	<ol style="list-style-type: none"> 1. Power System Lab 2. Energy Efficiency Lab 3. Biomass Energy Lab 4. Geophysics Lab 5. Smart Grid Lab 6. Fossil Fuel Exploration Lab
FTN	<ol style="list-style-type: none"> 1. Drying technology Lab and Physicochemical Lab 2. Cereal Processing Lab 3. Bioactive compound Extraction and Separation Workshop 4. Healthyrice Lab 5. Plant Health Lab 6. Fermentation lab 7. Food Technology Hall 8. Chromatography Lab
MIT	<ol style="list-style-type: none"> 1. Dynamic and Control Lab 2. Control System Lab 3. Electronics Fablab 4. EMC Lab 5. Computer Vision and Natural Language Processing Lab
MSS	<ol style="list-style-type: none"> 1. Nano-structure and Chemical Analysis Lab 2. Glass Structure Lab 3. Rubber Processing lab 4. Ceramic Lab 5. Materials Science and Engineering Lab 6. Geotechnical Lab 7. Civil Engineering Lab 8. XRD and XRF Lab

WAE	<ol style="list-style-type: none"> 1. HydroMet and Disaster Management Lab 2. Water Environment Lab 3. Soil Lab 4. The Khmer Earth Observation Lab 5. Water Supply and Sanitation Lab 6. Coastal & Wetland Environmental Lab 7. Environmental Chemistry Lab 8. Environmental Microbiology Lab 9. Air Pollution Analysis Lab 10. Air Quality Monitoring Lab 11. Pollutant Emission Research Lab
-----	---

5.4. High Impact Research and Innovation Projects

5.4.1. Establishment of Risk Management Platform for Air Pollution in Cambodia

The Air Quality Research Laboratory, supported by a \$4.5 million budget (2022-2027), has made significant progress in air pollution monitoring, environmental risk assessment, and capacity building. Key achievements include:

- Air Quality Monitoring Network Established (Figure below):
 - 9 low-cost (LC) sensors installed at key locations in Phnom Penh.
 - 6 PM sensors and a reference AQMS station at ITC for real-time air quality monitoring.
 - Laboratory enhancements with modern instruments (IC, HPLC, Carbon Analyzer) to improve air pollution analysis.

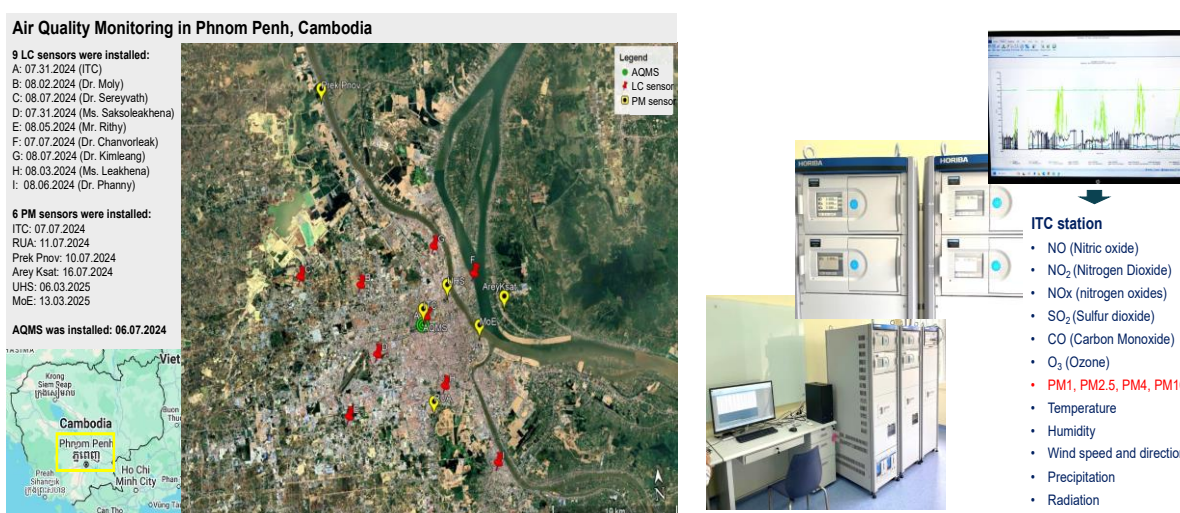


Figure 19. Overview of Air Quality Monitoring in Phnom Penh, Cambodia.



Figure 20. Specific location for PM sensor installation.

- **Online Network and Data Management System:**
 - Data transmitters installed at 5 locations, with network connection tests ongoing.
 - Online dashboard developed and undergoing testing for real-time monitoring.
- **Environmental Risk Assessment and Research Publications:**
 - Macroscopic risk analysis published in an international journal.
 - Study on personal exposure to pollutants during commuting published in Atmospheric Pollution Research.
 - Three international journal articles accepted, and research findings presented at global conferences (e.g., International Conference on Environmental Pollutants, Bangkok).
- **Capacity Building and Knowledge Sharing:**
 - Workshops, international seminars, and conference presentations (including in Bangkok and Japan).
 - Three international journal articles accepted, strengthening ITC's research reputation in air quality monitoring.
 - Dissemination through social media and a dedicated project website.

5.4.2. Cambodian Coastal Research Center (CCRC)

The establishment of the Cambodian Coastal Research Center (CCRC) is in its initial phase, aiming to lay the foundation for a national center of excellence in coastal research. While its physical space were recently set up on the new ITC Campus in Kep, several notable developments have taken place:

- **Strengthened Collaborations:** Partnerships have been reinforced with national institutions, such as the Ministry of Environment (MoE), Ministry of Land Management, Urban Planning and Construction (MLMUPC), and Ministry of Agriculture Forestry and Fisheries (MAFF). International collaborations have also grown, involving organizations like IRD, the Joint International Laboratory LOTUS (LMI Lotus), Chulalongkorn University, and the University of the Philippines Diliman.

- **Consultation meetings:** A series of consultation meetings has been organized to align research priorities with societal needs and provide effective input for government policies and non-governmental organizations. A series of consultation meetings will be conducted with government agencies (ministries) and non-government. The consultation process aims to highlight three fundamental outcomes: (1) ensure that research activities address pressing societal issues, (2) secure long term support from governmental agencies, and (3) foster a robust coastal research network to boost expertise in Cambodia.
- **Visit to the New ITC Campus in Kep:** In early February, researchers from ITC and IRD visited the new campus in Kep to assess its infrastructure and identify suitable spaces for the CCRC's operations.
- **Seawater Level Monitoring Station:** The first seawater level monitoring station is set to be installed in the coastal zone of Kep Province, with financial support from IRD.
- **Pilot Projects:** With funding from IRD, pilot projects have been launched, focusing on groundwater quality analysis and mangrove health assessment in Kep Province. Engineering students have been recruited to contribute to these initiatives.

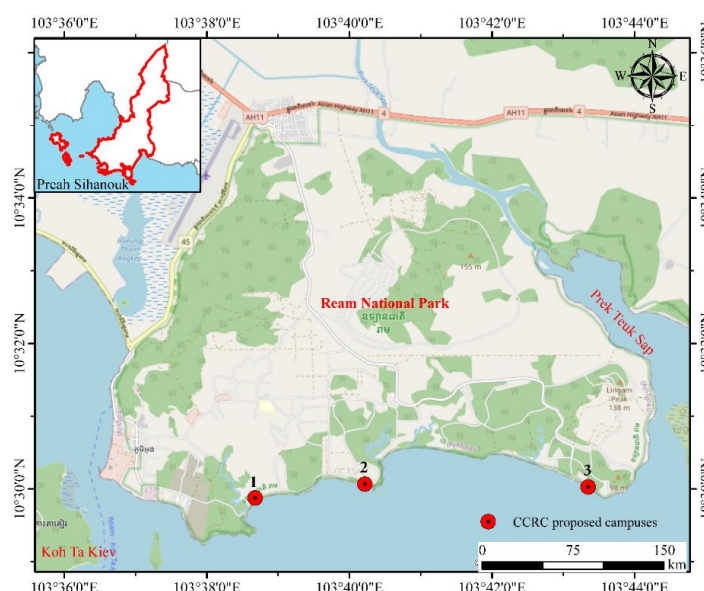


Figure 21. Locations of CCRC proposed campuses.

5.4.3. Higher Education Improvement Project (HEIP)

Higher Education Improvement Project (HEIP) has been conducted since end of 2019, funded by the World Bank, focusing on i) improving quality and relevant of academic program, ii) improving research in STEM and Agriculture, and iii) improving institutional governance. By March 2025, 4 curriculums of undergraduate programs (EE, EA, TN and GPE) and 4 Master programs (MAI, WEE, ETM, MIT) were revised and evaluated from international expert panels. 6 curriculums of new programs were developed including i) Pre-degree foundation program, ii) Applied Mathematic for Statistic, iii) Software Engineering, iv) Materials sciences and engineering, v) Master program of Data Science, vi) Master program of material science and engineering.

To date 24 (21MSc, 3PhD) were graduated in which 11 (10MSc, 1PhD) are female staff, other 9 (3MSc, 9PhD) will be graduated by June 2025, and other 11(8MSc, 3PhD) will be graduated by

December 2025. ITC completed 23 sub-research projects linked with industry and developed 23 research prototypes with total budget about USD 7.9 million. ITC has also submitted 96 articles to the international peer-reviewed journals.

From HEIP, the initiative of establishment of ITC new campus at Win-Win Monument boulevard with total land area of 5 hectares. 2 buildings are planned to construct in which one building (student dormitory) was already completed with 74 rooms and one more building (Research and Training Center) is under construction and expected be completed by June 2025.

5.4.4. Provincial Water Supply and Sanitation Project – PWSSP

The Provincial Water Supply and Sanitation Project (PWSSP), co-financed by ADB, AFD, and the European Union (EU-AIF), continues to enhance urban water and sanitation infrastructure in Cambodia. Despite the end of scholarship support in 2023, several milestones were achieved:

- Master’s Program in Urban Water and Sanitation Engineering (MUWE):
 - Since its establishment in 2018, 114 students (48% women) have received EU-AFD scholarships, surpassing the target of 110 students.
 - A total of 101 students have graduated, exceeding the project’s expected outcome.
 - In the 2023-2024 academic year, six students were enrolled through IRD’s project support and self-funding, mostly in research-based pathways.
- Research Contributions:
 - Phase I (2018-2021): Successfully completed nine research projects on urban water and sanitation engineering.
 - Phase II (2022-2023): Three additional projects received funding and are ongoing.
- Collaboration and Knowledge Sharing:
 - Organized an International Symposium on Water Supply and Sanitation (June 6-7, 2024), held jointly with ITC’s 13th Scientific Day, engaging academia, industry, and public sector stakeholders (Figure 22).
 - Strengthened institutional collaboration through MoUs signed in 2024:
 - May 8, 2024: MoU with the General Department of Water Supply, MISTI to enhance water supply development. (Figure 23)
 - October 21, 2024: MoU with MoWRAM to support water resources development in Cambodia.



Figure 22. International Symposium on “Water Supply and Sanitation”.



Figure 23. MoU signing ceremony between ITC and General Department of Water Supply, MISTI.

5.4.5. Platform for research and training on power system in Cambodia

The Research and Training Platform on Smart Grid of Cambodia Project, supported by European Union administered by AFD, has made significant progress in research, education. Key achievements include:

- Academic and Research Activities:
 - Master's Program:
 - 11 M1 students (Batch 1 in 2023): 5 students for M2 at Grenoble INP-UGA, another 2 M2 students for their internship at Grenoble INP-UGA and 4 M2 students at ITC
 - 12 M1 students (Batch 2 in 2024): 4 students for M2 at Grenoble INP-UGA, another 3 M2 students for their internship at Grenoble INP-UGA and 5 M2 students at ITC
 - PhD Programs: 4 PhD candidates (two under a double-degree program and two under a local degree program) progressed in their research.
- International Mobility:
 - Grenoble INP-UGA: 2 interns participated in research in Cambodia.
 - Staff exchanges: 2 staff members from ITC traveled to Grenoble INP-UGA, while 5 staff from Grenoble INP-UGA visited ITC.

5.4.6. Industry-Academic-Community Networks (INACON) Project

The INACON project, funded by JICA, continues to strengthen engineering education and research in Cambodia by fostering industry-academic-community collaborations. In 2024, the project achieved several key milestones:

- LBE Research Grant 2025:
 - 11 applications received, with 5 projects selected for funding (max budget: \$15,000 per project).
 - Research areas include asphalt sustainability, geodiversity assessment, bus route optimization, water treatment, and Khmer handwriting analysis using deep learning.
- Major International Conferences and Symposiums Supported:

- 3rd International Conference on Earth Resources and Geo-Environment Technology (EraGET 2024) (Dec 12-15, Phnom Penh & Siem Reap) with 500+ participants from 10 countries.
- International Symposium for Life Mechatronics (LMS2024) (Dec 27, Phnom Penh) with 60+ participants from Japan and Cambodia.

5.4.7. ARES Project

The Institutional Support Program (ISP) 2022–2027 at the Institute of Technology of Cambodia (ITC) aims to achieve international standards in teaching and research and to make research results available and valuable to Cambodian society. To meet these objectives, the project restructures and strengthens research transfer services (R1), notably by developing staff skills in technology transfer (R2); it enhances teaching and knowledge transfer capacities, with the aim of developing programs in line with international standards and accreditation (R3); it improves research organization (R4) and laboratory management (R5). Lastly, it develops documentation resources, notably through active participation in open science and open access (R6).

R1: Establishment of a Single Point of Entry for Technology Transfer

The organization among different units involved in research valorization (faculties, departments, RIC, IUL, Fablab, incubator) is being restructured to improve interactions (external request handling, communication of results, financial transfers). The rules related to financial flows and communication within the service framework have been approved by ITC and are being implemented.

The showcase website for the Single Point of Entry is under development. A business developer (Choen Chakrya) has been hired and has developed a support pathway for ideas to be valorized. An initial review by the RIC identified 11 ideas for potential valorization, across 5 research units. A systematic analysis of these 11 ideas, including a maturity diagnosis, is underway for each.

An external event titled *Venture Spark: Where Ideas Meet Investment*, inviting about 40 entities potentially interested in the technologies being developed, is scheduled for April 24. Potential investors were identified by the UIL and in collaboration with the Cambodia Chamber of Commerce (CCC). Six of the 11 ideas will be presented.

Regarding the planned web platform under R1, it was decided in Year 2 that it would be developed in collaboration with R4 (research management). Coordination is ongoing with R4 to ensure UIL and the single entry point are integrated into the platform being developed.

R2: Skills Development in Technology Transfer

R2 complements R1 by ensuring training for the valorization team in communication, legal, and commercial skills. These training sessions are ongoing.

- Legal skills: After the departure of the Belgian legal expert who conducted training last year, legal expertise has been subcontracted to BUN & Associates in Cambodia.
- Communication skills: A second training mission by the Belgian expert is scheduled for April 2025.

- **Commercial skills:** The business developer recruited under R1 will later provide transversal training in this area. Two one-month capacity-building mobilities in Belgium are planned in communication and commerce.

R3: Support for Academic Program Accreditation

Activities under R3 aim to create an ecosystem conducive to the effective preparation and improvement of ITC's academic programs for accreditation. The Mentorship Program (MP) helps strengthen teachers' scientific capacities and develop learning resources. General and specialized pedagogical training improves teachers' teaching skills in both the short and long term. ITC's education specialists will also be able to prepare self-assessment reports for accreditation.

Mentorship Program (MP) updates: 3 were initially planned, 5 are completed or planned:

- MP1 at ULB on *Transport Phenomena*
- MP2 at ULiège on *Food Processing*
- MP3 planned at ULiège on *Sustainable Road Infrastructure Design and Maintenance*
- MP4 planned at ULiège on *Durability and Sustainability in Reinforced Concrete Structures*
- MP5 to be conducted in later years on *Food Safety, Control, and Risk Management*

Pedagogical reinforcement: Two training missions were conducted at ITC in February 2024 and March 2025. Four ITC teachers also went to Belgium for pedagogical training at ULB and ULiège.

Accreditation: A mission by an ULiège expert took place in January 2025. It assessed the readiness of programs for accreditation and helped prepare necessary steps before submitting a formal application. The CTI is the proposed accreditation body, given the similarity between ITC's engineering programs and those in France. The Belgian expert has experience with CTI procedures. Following the mission, a self-assessment report is being prepared under ITC's Quality Manager. The submission is not planned for 2025 but will begin in 2026.

Separately, under the HEIP 2 project at ITC, some programs will be prepared for AUN-QA accreditation. This diversity of accreditations will strengthen ITC's visibility and cooperation at the regional and international levels.

R4: Research Management Support

Activities are progressing well.

Research partnerships between ITC and Belgian universities have been established for the supervision of master's theses. Three 3-month stays took place last year (2 at UMons and 1 at ULiège-GxABT), enabling co-supervision between Cambodian and Belgian supervisors. A 3-month stay is planned from mid-April to mid-July 2025 at ULB. A joint PhD program between ITC and UMons has started in Year 2. The PhD student, Ms. ENG Samphors from ITC's Electrical Engineering Department, began in January 2024. The thesis continues normally (6 months/year at ITC, 6 months/year at UMons).

Training missions:

- A Belgian expert conducted a scientific writing training in December 2024.
- Another expert from ULiège will conduct a training on Large Information System Management in July 2025.

Research management platform: It was decided to develop the web platform planned under R1 in collaboration with R4 to create an institutional platform for research valorization and management. The platform is scheduled to be launched this year (see R1).

A workshop to review the platform was held in early March 2025, and three developers will be hired starting April 1, 2025.

R5: Laboratory Restructuring and Management

An analysis of ITC's laboratory operations was completed and a report is available, with proposed actions to improve lab organization, including unified structure, roles, and tasks.

Two labs were selected for case studies:

- The Chemistry Laboratory
- The Materials Science and Structural Mechanics Laboratory, which was the subject of two detailed reports aiming to establish it as a demonstration lab.

Reports for the Chemistry Laboratory are expected soon.

The next focus for ITC is digitization of labs and the implementation of 5S organization.

R6: Support for Documentation Resources and Open Science

R6 aims to support research and education by improving access to documentation resources and supporting Open Science.

- Open Science training by a Belgian expert was conducted in June 2024. Many open access links to books, articles, journals, and databases were shared with students, teachers, researchers, and partner universities.
- A workshop on Open Access publishing for ITC researchers, co-organized by R6 and R2, featured experienced researchers who shared best practices. The Techno Science Research Journal platform was also presented.

The library launched a new website for information sharing. It offers content on open access databases, how to search, use, and publish, and aims to develop a culture of open access among ITC researchers, staff, and students.

A new server was acquired in Year 1 to install Koha, the new integrated documentation management system. The import of data from PMB to Koha will begin in April after a short training session.

A high-capacity storage server for an institutional repository at ITC has also been acquired. Installation and configuration will occur after the ITC PAR mission to Belgium in April 2025. That mission aims to meet Belgian university library teams who have implemented institutional repositories (to compare best practices in open access and repositories).

A South-South mission to Malaysia is planned for June 2025 for two library staff members to attend a conference gathering librarians from various Asian institutions.

5.5. Techno Incubation Center

The missions of the Techno Incubation Centre are to provide additional capacity building to catch up industrial know-how, business knowledge and market opportunity, facilitate prototyping activities and business venture, and mobilize people, funding and investment

The fields covered by the Techno Incubation Center are connected to the 5 Research Units of the Research and Innovation Centre, namely: Water and Environment (WAE), Food Technology and Nutrition (FTN), Materials Science and Structure (MSS), Mechatronics and Information Technology (MIT), and Energy Technology and Management (ETM). However, 2 fields of innovations have been prioritized:

- Innovations with Emerging Technologies: It includes the use of Robotics, AI (Artificial Intelligence), Mechatronics, Big Data, Cloud Computing, IoTs, Cybersecurity, Automation. The High Technologies can be applied to agriculture (smart farming), energy (smart energy production and use), and of course Industry 4.0 (prototyping, product design, quality control in manufacturing, energy and environmental management).
- Innovation in Food processing and Food Safety: It includes the techniques for developing affordable, safe, attractive and sustainable food "Made in Cambodia" involve many Scientific fields such as agronomy, food science, waste and by-products valorisation, food process design, biotechnological process, microbiology, biochemistry, analytical chemistry, materials science for food packaging aspects, etc.

“Techno Innovation Challenges” Program

Techno Incubation Center has annual activity called “Techno Innovation Challenges”, aiming to promote the education to entrepreneurship. In 2024, About 136 students registered to join the business idea competition and involved in entrepreneurship learning program. Among the students, there are 49 students accounted for 10 group of business ideas have been successfully completed and awarded as the best business innovation ideas. As given in Table below, the business concepts are initiated by ITC students and students at other universities as well. The business ideas are in the following categories:

- (1) Agriculture and food technology
- (2) Education
- (3) Health
- (4) E-commerce
- (5) Digital technologies

No	Group Name	Members	Gender	University Name	Year	Field	Business concept
1	Agri Tech	CHHORN Rachhat	M	ITC	3	Mechanical Engineering	Solving soil health problem through digital controlling system
		TOEY Ti	M	RUPP	3	Physics	
		CHHAY Sreymean	F	ITC	3	Mechanical Engineering	
		LYN Monkol	M	RUA	4	Agricultural Development	
		CHHORN Chanratanak	F	ITC	3	Mechanical Engineering	
2	Cam-Borbor	SONG Linda	F	ITC	4	Food Science and Technology	Producing set of healthy foods for busy people
		SOR Sokna	F		4		
		DO Laychhay	M		4		
		PHO Mengleang	M		4		
3	CIR (Creative Ideas of Rice)	LOUNH Raksa	F	ITC	3	Food Science and Technology	Producing hair care product from rice
		MAI Nita	F		3		
		MAI Pailin	F		3		
		MAO Nary	F		3		

		MET Lita	F		3		
4	Eco-Craft	NY Sopanha	M	ITC	3	Civil Engineering	Recycling construction materials into new product
		VIN Chenda	F		3		
		VONG Vanna Pich	M		3		
		PHEACH Makara	M		3		
		LUN Sokha Raboth	M		3		
5	F3M	CHHOEUM Sochhim	F	ITC	3	Electrical and Energy Engineering	Developing sign language system to improve social communication
		CHUN Samnang	M		3		
		DUX Molika	F		3		
		EN Toch Bolin	F		3		
		KE Sovisoth	M		3	Data Science	
		PHOEURN Kimhor	M		3		
6	PLS	SEANG Taravichet	M	CamEd Business School	3	Accounting and Finance	Designing a platform for counterfeit goods market
		PHAL Pichpisiddh	M		4		
		LOU You On	M		3		
7	The New GenZ	KHEANG Tekngim	F	ITC	3	Electrical and Energy Engeneering	Producing a device that can control daily electrical consumption
		LIV Sovannarith	M		3		
		LY Jinglean	M		3		
		LY Sokpanha	M		3		
		LY Virak	M		3		
8	MindEA SE	VAN Meysorng	F	AUPP	2	Health	Solving mental health of individual through consultation
		HIENG Dara	M	AUPP	2		
		SOT Sochetra	M	CADT	2		
9	Khash Chat	LAY Keangleng	M	AUB	3	Computer Science	Solving financial challenges for startup through technology and partnership
		CHHIT Helen	F	AUB	3	Business IT	
		SRENG Hengsal	M	IISPP	3	International Relation	
		CHUM Sothealeap	F	IISPP	3	International Relation	
		LEAVCHUM Sopanha	M	AUB	3	Finance and Banking	
		TOCH Ensophea	M	AUB	3	Finance and Banking	
10	The Brown	LY Danin	F	ITC	3	Electrical and Energy Engineering	Recycling old vehicles into new ones using electric
		NA Sophornsatya	M		3		
		NEAN Sreynin	F		3		
		MA Sophal	M		3		
		MOV Sinai	M		3		
		LYNA Sovadaroth	M		3		
		LY Korngmeng	M		3		

“National Status of Student-Entrepreneur” Initiative

In the 2024-2025 academic year, the Institute of Technology of Cambodia (ITC) assisted the Ministry of Education, Youth and Sports (MoEYS) in coordinating the development of the Statut National Étudiant Entrepreneur (SNEE) project, funded by the Agence Universitaire de la Francophonie (AUF). This initiative aims to institutionalize a national framework that formally recognizes and supports student entrepreneurs within Cambodian higher education.

Over the past year, ITC led the development of two key documents:

1. A guideline for the establishment of the national student-entrepreneur status.
2. A three-year national action plan for implementation across universities in Cambodia.

The work included a review of international best practices, and the organization of consultative workshops with stakeholders from MoEYS, universities, incubators, and the private sector. These collaborative efforts ensured that the proposed framework reflects both global standards and local contexts.

The finalized documents will be submitted to MoEYS for national adoption, marking a critical step toward positioning entrepreneurship as a recognized and supported academic path in Cambodia.

5.6. Conclusion

The 2024–2025 academic year highlights the growing maturity and strategic direction of the Research and Innovation Center (RIC) at the Institute of Technology of Cambodia (ITC). Since its establishment in 2015, RIC has played a central role in promoting applied research, innovation, and collaboration within and beyond the institution.

This year, 112 researchers contributed to 52 active research projects, supported by 27 newly funded initiatives. With a publication output of 218 peer-reviewed articles and participation in over 400 scientific events, ITC has demonstrated continued leadership in producing high-quality research with national and international relevance.

Many projects focused on applied and developmental research, generating concrete solutions to local and regional challenges—such as biomass energy, energy efficiency, microplastic filtration, sustainable food processing, and smart infrastructure. These initiatives often align with national priorities, reflecting ITC’s role in supporting evidence-based policy and industry innovation.

International collaboration remains a key strength, with successful partnerships involving institutions and funding agencies from France, Belgium, Japan, the United States, Australia, and the UK. Research efforts also received strong support from national entities including MoEYS, HEIP, and CCCA.

A robust network of 38 research laboratories continues to support the implementation of cutting-edge research and enhance the university’s capacity for both experimentation and advanced training. Despite a decrease in the total number of active projects—attributable to the completion of earlier initiatives—RIC has maintained strong momentum in research output and funding acquisition.

Going forward, RIC will focus on strengthening research governance, enhancing cross-sectoral collaboration, and expanding strategic partnerships, ensuring long-term impact and alignment with Cambodia’s development goals.

6. National and International Cooperation

6.1. Memorandum of Understanding and Memorandum of Agreement

As part of its internationalization strategy, the Institute of Technology of Cambodia (ITC), like leading universities around the world, aims to strengthen and expand its network of local, regional, and international partnerships. The objective is clear: to develop strong academic and scientific collaborations, encourage mobility, and increase the exchange of expertise to enrich the educational experience and research.

This commitment was realized during the 2024-2025 academic year with the signing of 17 Memoranda of Understanding (MoUs) and 11 Framework Agreements (MoAs) with various partner institutions. These agreements lay the foundation for lasting cooperation, paving the way for joint projects, mobility programs, and collaborative research initiatives.

The table below presents a summary of the MoUs and MoAs signed with academic partners, illustrating ITC's ongoing commitment to being part of a dynamic and promising international academic network.

No	Nom de l'institution	Pays	Date	Type (MoU/MoA)
1	IPB University	Indonesia	2024-06-30	MoU
2	HARBIN Institutue of Technology, SHENZHEN	China	2024-07-01	MoU
3	CHEA LEA THOM Primery School	Cambodia	2024-07-18	MoU
4	Ecole 42	France	2024-10-24	MoU
5	Renaissance Minerals (Cambodia) Limited	Australia	2024-12-04	MoU
6	APESAM	France	2024-12-12	MoU
7	Centennial College	Canada	2024-12-20	MoU
8	Association Polytechniciens Khmers	Cambodia	2025-01-10	MoU
9	University of Central Missouri	USA	2025-03-11	MoU
10	Macquarie University	Australia	2025-03-14	MoU
11	Battambang Teacher Education College (BTEC)	Cambodia	2025-03-14	MoU
12	Sirindhorn International Institute of Technology, Thammasat University	Thailand	2025-03-17	MoU
13	University of Shanghai for Science and Technology	China	2025-04-07	MoU
14	Lycée HUN Sen Chamkar Dong	Cambodia	2025-04-25	MoU
15	Guangxy Polytecnic of Construction	China	2025-05-13	MoU
16	Kasesart University	Thailand	2025-05-21	Renewed MoU
17	Universitas Muhammadiyah Yogyakarta and Universitas Muhammadiyah Surakarta (UMS)	Indonesia	2025-06-12	MoU
18	China International Water & Electric (CWE)-Hohai (HHU)	China	2025-05-24	MoA
19	IMT Nord Europe/ISPA	France	2025-05-19	MoA
20	AIX-Marseille Université/CHABAUD Maelle	France	2025-04-04	MoA
21	AIX-Marseille Université/MACCOTTA Lara	France	2025-04-04	MoA

22	AIX-Marseille Université/LASSERIE Yaelle	France	2025-04-04	MoA
23	Sirindhorn International Institute of Technology, Thammasat University	Thailand	2025-03-17	MoA
24	Sirindhorn International Institute of Technology, Thammasat University	Thailand	2025-03-06	MoA
25	Centennial College	Canada	2024-12-20	MoA
26	École de l'Air et de l'Espace (Linda)	France	2024-12-12	MoA
27	École de l'Air et de l'Espace (Axel)	France	2024-12-12	MoA
28	CIRAD, Letter of hosting Agreement	France	2024-12-12	MoA

6.2. Foreign Students and Institutions at ITC

6.2.1. Foreign students at ITC

As part of multilateral inter-university exchanges, the Institute of Technology of Cambodia (ITC) continues to strengthen its international dimension. For the 2024-2025 academic year, 51 international students were welcomed to the institution.

The arrival of these international students and researchers not only enriches the academic community, but also serves as a real catalyst for development. It contributes to a stimulating multicultural environment, which benefits both local students and teaching staff. Such diversity fosters open-mindedness, encourages the exchange of ideas, and strengthens the quality of training.

On an institutional level, attracting international students increases ITC's visibility and prestige on the global stage. It also facilitates the establishment of new partnerships and boosts academic and scientific collaborations. From an economic and social perspective, inbound mobility generates tangible positive impacts: international students contribute to the local economy through their spending on housing, food, transportation, and cultural activities. In the longer term, they contribute to strengthening the international reputation of not only ITC, but also Cambodia as a whole. Detail information is shown in Annex 47.

6.2.2. Foreign Organizations on ITC campus

As the Cambodia Institute of Technology places more emphasis on research and innovation, we have foreign organizations on our campus that are involved in different areas of research with ITC researchers. These international partners are as follow:

1. Agence Universitaire de la Francophonie (AUF-3)
2. Centre de Coopération Internationale en Recherche Agronomique pour le Développement (CIRAD-4)
3. Institut de Recherche pour le Développement (IRD-24)
4. JICA INACON Project (2)
5. Establishment of Risk Management Platform for Air Pollution (ERMPAP-SATREPS Project-2)
6. ECAM LaSalle (2)

Pour le fonctionnement de ces organismes, ils emploient 34 personnes de différentes nationalités qui sont en pleine activités.

6.3. Collaboration with industries

The University-Industry Linkage Office (UIL) at the Institute of Technology of Cambodia (ITC) is dedicated to fostering productive relationships between academia and the private sector. This report provides a comprehensive overview of the collaborative endeavors undertaken by UIL during the period of June 2024 to May 2025, between this timeframe, ITC engaged in a total of 152 collaborative activities with the private sector (See table below), reflecting its ongoing commitment to industry partnerships, research innovation, and knowledge sharing. The detail of each activity is shown in the following Appendix Tables.

Table 14. Activities of UIL collaboration with industries from June 2022 to May 2025.

No.	Collaboration with industries	Number of collaborations		
		2023	2024	2025
1	Organizing seminar and workshop for lecturer and student	36	43	40
2	Joining seminar and workshop organized by organization/ministries/universities/abroad	10	23	16
3	Industry visit ITC	36	30	50
4	ITC lecturer and student visit industry	35	19	17
5	Projects, training and consulting services for private sectors	13	27	19
6	MoU and MoA with industry	15	9	10

Notes: 2023 (June 2022 - May 2023); 2024 (June 2023 - May 2024); 2025 (June 2024-May 2025)

Key Achievements from June 2024 - May 2025

The Cambodian National Model of University Intellectual Property Policy, which can be adapted for ITC, has been developed under the CAPFISH Capture: Post-harvest Fisheries Development project and the Food Technology, Research, and Innovation Platform (FTRIP). Legal documents, including the Intellectual Property Assignment Agreement and Consulting or Training Service Contract (available in both Khmer and English), have been created with financial support from the ARES-CCD Project (R2). Additionally, a website and platform for ITC services, expected to be completed by June 2025, are currently under development with support from the ARES-CCD Project (R1). An internal Financial Rule Guideline has also been drafted.

6.3.1. Seminars and Workshops

Based on the Annex 48, between June 2024 and May 2025, UIL successfully conducted **40** seminars and workshops, enhancing technical and soft skills for ITC students and faculty (See in Annex 48). These events covered topics such as digital transformation, artificial intelligence applications in engineering, climate change adaptation, and career development strategies. Moreover, ITC participated in **16** externally hosted seminars and workshops, reinforcing collaborations with ministries, private companies, and international organizations (Annex 49).

6.3.2. Industry Engagement and Visits

UIL facilitated **50** industry visits to ITC, strengthening direct engagement between ITC students, faculty, and corporate leaders (See in Annex 50). These interactions helped align academic training with industry expectations. Additionally, **17** outbound visits were organized for ITC students and faculty to gain firsthand industry exposure, covering fields such as renewable energy, construction technologies, and manufacturing automation (See in Annex 51).

6.3.3. Collaborative Projects, Training and Consulting Programs

UIL partnered with **19** private sector stakeholders to develop targeted training programs and collaborative research projects (See in Annex 52), categorized into two main service types: **Projects**: 15 entries (79%) and **Training**: 4 entries (21%). This indicates that the institution is primarily engaged in **project-based collaborations**, with a smaller proportion dedicated to training.

The projects and training sessions involve a diverse range of industries, including:

- Environmental Sustainability & Water Management (e.g., ASEANO2, FAO Water Scarcity Project, Phnom Penh Water Supply)
- Engineering & Construction (e.g., Mega Asset Management, SNKRP Co., Ltd.)
- Agriculture & Food Security (e.g., CAPFish - UNIDO, ACIAR, CIRAD)
- Technology & Robotics (e.g., Western Sydney University, Australian Centre for Robotics)
- Cultural Heritage & Restoration (e.g., Archaeological Survey of India).

6.3.4. Memoranda of Understanding and Memoranda of Agreement

ITC signed **10** new MoUs and MoAs with industry partners (See in Annex 53). Key Outcomes & Benefits from partnership agreements included:

a. Internships & Student Development

- Internships are a major focus, with multiple agreements supporting student placements:
 - HOTEL OFURO Co., Ltd and Tekoma Energy KK: Internship for two students in Japan.
 - Phnom Penh Autonomous Port (PPAP): 44 interns recruited (from 2023 to 2025).
 - Renaissance Minerals (Cambodia) Ltd: Internships & practical training.
 - Panasonic: Offers scholarships, internships, and training for ITC's GIM department students.

b. Research & Development (R&D) Collaborations

- SATO KOGYO: Engages in R&D, education, infrastructure development, and community engagement.
- Confirel Co., Ltd.: Includes joint research, skill development, intellectual property collaboration, and lab partnerships.
- Renaissance Minerals (Cambodia) Ltd: Aims to develop academic curricula and provide professional training.

- Khamsa Group of Business: Collaborates with ITC on robotics, AI, IoT, and emerging technologies.
- c. Technical Support & Assurance Engagement
 - Rating Agency of Cambodia Plc.: Focuses on technical assurance engagement with ITC.
 - Phnom Penh Autonomous Port (PPAP): Provides scholarships and industry training.
- d. Establishing a Regional ICT Training Center
 - Huawei: Establishing a Regional ICT Training Center at ITC, providing training materials, lab equipment, and internship opportunities.

6.3.5. Flagship Events

UIL successfully hosted **the 7th Industry Consortium** that highlighted the growing collaboration between academia and industry. Held on December 4, 2024, the event gathered over 30 companies and academic leaders to discuss key strategies for enhancing Cambodia's technological and industrial sectors. With a focus on aligning academic programs with industry needs, developing professional training opportunities, and fostering research innovation, ITC showcased its commitment to sustainable development. New initiatives, such as an **Industry Advisory Board** and an **Apprenticeship Program**, were introduced to bridge the gap between academia and the job market, fostering long-term partnerships and skills development (For more detail: [Report of Industry Consortium 2024.pdf](#)).

6.3.6. Strategic Directions for 2025 and Beyond

UIL is committed to expanding industry collaboration through:

- Strengthening professional development programs to address evolving industry skill gaps.
- Increasing student internship placements with leading industry partners.
- Enhancing research commercialization efforts through joint industry-academia projects.
- Improving digital outreach to expand engagement with international corporations.

6.3.7. Conclusion

From June 2024 to May 2025, UIL has played a crucial role in fostering industry-academia partnerships, promoting skill development, and driving technological innovation at ITC. These collaborations continue to provide ITC students and faculty with valuable industry exposure, bridging the gap between academia and real-world applications. Moreover, the UIL main office has relocated to a new building (J-101), which will serve as a dedicated career and training center. Additionally, this space will be available for private sector rental to host events and showcase their products/services. Furthermore, it will provide a platform for ITC students and researchers to exhibit their product prototypes, fostering collaboration and promoting ITC's capabilities to the private sector.

Annex

Annex 1. Minutes of the International Consortium Meeting on 26-27 March 2025.



COMPTE-RENDU DE LA REUNION DU CONSORTIUM INTERNATIONAL D'APPUI A L'ITC Les 26 et 27 mars 2025, à l'ITC, Phnom Penh

MEMBRES DU CONSORTIUM 2025

I. Établissements étrangers

No	Nom de l'établissement	Sigle	Pays
1	Ministère de l'Éducation, de la Jeunesse et des Sports	MoEYS	Cambodge
2	Ambassade de France	AF	France
3	JICA Cambodia Office	Jica	Japan
4	Ministère des Mines et de l'Énergie	MME	Cambodge
5	Agence Universitaire de la Francophonie	AUF	AUF
6	Centre international de recherche agricole pour le développement	CIRAD	France
7	Chambre de Commerce et d'Industrie France Cambodge	CCIFC	France
8	DevKhmer SARL	DevKhmer	Cambodge
9	École Nationale Supérieure de l'informatique pour l'Industrie et l'Entreprise	ENSIIE	France
10	École Catholique des Arts et Métiers	ECAM LaSalle	France
11	École Nationale des Ponts et Chaussées	ENPC	France
12	École Nationale Supérieure en Génie des Technologies Industrielles (ENSGTI), UPPA	ENSGTI	France
13	IMT Mines Alès, représentant Institut Mines-Télécom	IMT Mines Alès	France
14	INSA Lyon	INSA Lyon	France
15	INSA Toulouse	INSA Toulouse	France
16	Institut National des Sciences appliquées de Rennes	INSA Rennes	France
17	Institut de Recherche pour le Développement	IRD	France
18	Institut National Polytechnique de Toulouse	INP Toulouse	France
19	Institut Pasteur du Cambodge	IPC	Cambodge
20	Institut Universitaire de Technologie d'Orsay	IUTO	France
21	IUT de Saint-Nazaire	IUT	France
22	Kasetsart University	KU	Thaïlande
23	Kyushu University	KU	Japon
24	Montpellier SupAgro	Montpellier SupAgro	France
25	Northeastern Illinois University	NIU	USA
26	Polytech Lille	Polytech Lille	France
27	Schoolab / Hexagon	Schoolab	France

28	Institute of Science Tokyo	Tokyo Tech/IST	Japon
29	Université catholique de Louvain	UCLouvain	Belgique
30	Université de la Réunion	UR	France
31	Université de Liège	ULiège	Belgique
32	Université de Liège, Gembloux Agro-Bio Tech	Gembloux Agro-Bio Tech	France
33	Université de Mons	UMONS	Belgique
34	Université de Namur	UN	Belgique
35	Université de Rennes	UNIV Rennes	France
36	Université Libre de Bruxelles	ULB	Belgique
37	Université Paris-Sud	UPS	France
38	Université Paul Sabatier	UPS	France
39	Université Sorbonne Paris Nord	UP 13	France
40	VOLTRA Co., Ltd.	VOLTRA	Cambodge

II. Partenaires institutionnels

41. M. Pierre VINCENT, Conseiller de coopération et d'action culturelle, Ambassade de France au Cambodge et Directeur de l'Institut Français du Cambodge
42. Mr. Einosuke KAMEGAI, Second Secretary for Economic & ODA Section, Embassy of Japan
43. S.E. le Dr. OM Romny, Secrétaire d'État au ministère de l'éducation, de la jeunesse et des sports
44. S.E. Mme PEN Chhorda, Secrétaire d'État au ministère des mines et de l'énergie
45. M. Nicolas MAINETTI, Directeur Asie-Pacifique de l'AUF
46. Mme BOUCHER Sandrine, Directrice au Cambodge chez l'AFD
47. M. KOICHIRO Watanabe, Senior Advisor of JICA
48. M. Luc LE CALVEZ, Représentant de l'IRD au Cambodge
49. M. ROGER François, Directeur régional Asie-Pacifique, Centre international de recherche agricole pour le développement (CIRAD)
50. M. JULLIARD Charles, Chambre de Commerce et d'Industrie France Cambodge (CCIFC)

III. Entreprises

51. M. Franck TOUCH, DevKhmer SARL Co., Ltd.,
52. M. VAUDIN Yann, VOLTRA Co., Ltd.,

IV. Membres invités

53. Mme Thi Anh-Dao TRAN, Attachée de Coopération Universitaire et Scientifique, Ambassade de France au Cambodge
54. M. IM Kravong, Représentant AUF-Cambodge
55. M. JUN-ICHI Takada, Executive Vice President for Global Affairs, Institute of Science Tokyo
56. M. THOEUN Vongdy, JICA Cambodia Office
57. Mme TRIA Assia, IMT Mines Alès
58. Mme ANDRÉ Françoise, IMT Mines Alès
59. M. DESPLANCHE Didier, ECAM LaSalle de Lyon
60. M. AUBERT Pascal, Université Paris-Saclay
61. M. VINCKE Bastien, Université Paris-Saclay
62. Mme THIBON Isabelle, Institut National des Sciences appliquées de Rennes
63. M. SPIEGEL André, Institut Pasteur du Cambodge
64. M. VERLEYSEN Michel, Université catholique de Louvain
65. M. DEBASTE Frédéric, Université Libre de Bruxelles et Représentant des Belges
66. M. CARLETTI Timoteo, Université de Namur
67. Mme DASNOY Christine, Université de Liège

68. Mme LEROY Christine, Attachée et Gestionnaire Appui Institutionnel-ARES
69. M. GOSSELIN Bernard, Université de Mons
70. M. ENGLERT Yvon, Expert, AH&J
71. M. ANGLES Paul, INSA Toulouse
72. M. SKRZYPEK Thibaut, École nationale des ponts et chaussées
73. M. CYR Martin, Université Paul Sabatier
74. M. MAUSSION Pascal, INP Toulouse
75. M. OBRECHT Christian, INSA de Lyon
76. M. Kévy JOHANNES, INSA de Lyon
77. M. KUZNIK Frédéric, INSA de Lyon
78. Mme KASEL Alexandra, Ambassade de France
79. M. DARRACQ Bruno, Institut Universitaire de Technologie d'Orsay
80. M. SANGLEBOEUF Jean-Christophe, Université de Rennes
81. Mme WARAPA Mahakarnchanakul, Kasetsart University
82. Mme CHAISERI Siree, Kasetsart University
83. Mme LEGEAS Béatrice, IUT de Saint-Nazaire
84. Mme SESTER Mathilde, CIRAD
85. Mme Chikako SASAKI, Industrial Linkage/Project Coordinator JICA/ INACON Project
86. M. Kotaro Yonezu, KYUSHU University
87. Mme Stéphanie LEROY, CNRS - Laboratoire Archéomatériaux et Prévision de l'Altération/Institut de Recherche sur les ArchéoMATériaux (CNRS/Université Paris Saclay)
88. Mme AVALLONE Sylvie, Montpellier SupAgro
89. Mme LENCZEWSKI Melissa, Northeastern Illinois University
90. M. PHALIP Vincent, Polytech Lille
91. M. CHABRIAT Jean-Pierre, Université de la Réunion
92. M. JAN Bogaert, Université de Liège, Gembloux Agro-Bio Tech
93. M. COLBEAU-JUSTIN Christophe, Université Paris-Sud
94. M. CHARLES Yann, Université Sorbonne Paris Nord
95. M. DOSSANTOS-UZARRALDE Pierre, École Nationale Supérieure de l'informatique pour l'Industrie et l'Entreprise
96. M. MERCADIER Jacques, École Nationale Supérieure en Génie des Technologies Industrielles (ENSGTI), UPPA
97. M. GURRIN Cathal, Dublin City University

V. Équipe de direction de l'ITC

V. 1. Direction

98. S.E. le Dr. PHOEURN Sackona, Présidente du Conseil d'Administration et ministre de la culture et des beaux-arts
99. S.E. le Prof. PO Kimtho, Directeur de l'ITC
100. M. SOY Ty, Directeur adjoint
101. M. BUN Kim Ngun, Directeur adjoint
102. M. NGUON Kollika, Directeur adjoint
103. M. Ludovic PROTIN, Directeur honoraire de l'ITC
104. M. CHUNHIENG Thavarith, Conseiller pour la coopération
105. M. NUTH Sothân, Conseiller pour les affaires académiques
106. M. PENH San, Conseiller pour l'administration

V.2. Facultés, départements et sections

107. M. OR Chanmoly, Directeur du centre de recherche et d'innovation ((RIC)
108. M. LIN Mongkolser, Vice-directeur du centre de recherche et d'innovation et Chef du département des mathématiques appliquées et statistiques (AMS)
109. M. SIM Tepmony, Directeur de l'École doctorale (GS)
110. M. HAN Virak, Doyen de la faculté de génie civil (GCI)

111. M. CHHUON Kong, Doyen de la faculté d'hydrologie et des ressources en eau (GRU)
112. M. IN Sokneang, Doyenne de la faculté de génie chimique et alimentaire (GCA)
113. M. ENG Chandoeum, Doyen de la faculté de génie de géo-ressources et de géotechnique (GGG)
114. M. CHRIN Phok, Vice-doyen de la faculté de génie électrique et Chef de département de génie électrique et énergétique (GEE)
115. M. CHAN Sarin, Vice-doyen de la Faculté de génie électrique et chef du département de génie industriel et mécanique (GIM)
116. M. LAY Héng, Doyen de la faculté de génie électrique et chef du département de génie informatique et communication (GIC)
117. M. PHUN Veng Kheang, Chef du département de génie des transports et des infrastructures (GTI)
118. Mme SREY Malis, Chef du département de Tronc Commun (TC)
119. Mme KHEMTRAN Krasel, Coordinatrice de la Section de français (SF)
120. M. SO Phea, Head of English Section (SA)
121. Mme HANG Vichothy, Head of Administration Office
122. M. SOK Kimheng, Head of the Library STEM
123. Mlle SANG Davin, Deputy-head of University-Industry Linkage (UIL)
124. M. SRENG Sochenda, Vice-Dean of the Faculty of Electrical Engineering in charge of the department de Génie de Télécommunications et Réseaux (GTR)
125. M. SRANG Sarot, Head of ECAM Engineering Program at ITC and Head of Dynamics and Control Laboratory (DCLab)
126. Mme HANG Leakhena, Chef du bureau de l'assurance de qualité interne (QA)
127. M. CHEA Samneang, International Program Manager
128. M. KHIEV Samnang, Responsable du service informatique (IT)
129. M. SIEANG Phen, Head of International Relations Office (IRO)

Cette année, la réunion du Consortium international d'appui à l'ITC a repris son rythme habituel, soit une journée et demie. Malgré tout, étant donné que certains de nos membres étaient dans l'impossibilité de déplacement pour diverses raisons, nous avons décidé d'organiser une réunion hybride pour les séances plénières et les discussions dans les départements respectifs. Pour comprendre plus précisément, nous vous invitons à lire l'ordre du jour présenté ci-dessous:

Jour 1 : Mercredi 26 mars 2025

7h30 - 8h30 : Accueil des participants

8h30 - Session plénière dans la salle A-110

8h30 - 10h30 :

- Discours de bienvenue de S.E. PHOEURNNG Sackona, Présidente du CA de l'ITC
- Méthodologie de travail et objectifs de la réunion du consortium 2025
- Bilan d'activités 2024 - 2025
 - Événements marquants (S.E. M. PO Kimtho)
 - Bilan des études, e-learning et bibliothèque (M. SOY Ty)
 - Bilan de recherche, coopération, cellule d'interface (M. Bun Long)

10h30 - 11h00 : Pause-café

11h00 - 12h00 : Perspective et Stratégie 2025-2026 (M. BUN Kimngun)

12h00 - 13h00 : Déjeuner à l'ITC

13h00 Sessions par 5 groupes : Groupe 1 (AMS, GIC, GTR, MIT), Groupe 2 (GCI, GAR, GTI, GGG, MSS), Groupe 3 (GEE, GIM, ECAM, ETM), Groupe 4 (GCA, GRU, WAE&FTN), Groupe 5 (DTC)

13h00 - 17h30 : Travail en groupe
13h00 - 14h00 : Présentation
14h00 - 17h30 : Discussion (avec la pause-café)
18h30 - Diner convivial organisé par la direction de l'ITC

Jour 2 : Jeudi 27 mars 2025

08h30 : Session plénière dans la salle A-110

08h30 - 12h00 Présentation des synthèses des groupes de travail

Départements : 8 minutes par département

Pause-café

3ème cycle (Master et Doctorat) : 15 minutes

Recherche et Innovation : 15 minutes

En introduction, **S. E. Mme PHOEURNG Sackona**, Ministre de la Culture et des Beaux-Arts et Présidente du Conseil d'Administration de l'ITC, salue tous les membres et surtout les nouveaux membres du Consortium international d'appui à l'ITC, de France, du Japon, de Belgique, de Thaïlande et d'autres pays, en présentiel et en ligne. Ce regroupement multilatéral permet toujours de renforcer le développement de l'ITC. Votre présence d'aujourd'hui témoigne bien de votre fidélité. L'IRD, le CIRAD, l'AFD, l'ARES, La JICA et bien d'autres partenaires sont des piliers cruciaux pour que l'ITC devienne ce qu'il est actuellement.

« Votre appui depuis plus de 30 ans contribue davantage au développement durable de l'ITC. L'existence d'un tel Consortium international et d'un tel Conseil d'administration, c'est un record au Cambodge », a-t-elle ajouté.

Vous savez, quand vous me rappelez le CIC, Comité international de coordination – Angkor. Sachant que depuis 1993, le CIC-Angkor est un mécanisme international de coordination de l'assistance offerte par différents pays et organisations à la sauvegarde et au développement du site historique d'Angkor. Son rôle est aussi comme celui du Consortium international de l'ITC.

On voit donc que ces soutiens occupent une place prépondérante pour le développement durable du Cambodge.

Par ailleurs, on voit aussi la présence de la nouvelle génération qui assume une grande responsabilité pour maintenir la qualité de formation et de recherche à l'ITC. L'avenir de l'ITC vous appartient.

Je tiens à toutes et à tous remercier grandement pour toutes les grandes réalisations que nous avons réalisées ensemble.

Après le tout de table, elle a invité la représentante de l'Ambassade de France, Mme TRAN Thi Anh-Dao, Attachée de coopération universitaire et scientifique, qui glisse ses petits mots comme les suivants :

.....

Mme TRAN Thi Anh-Dao, Attachée de Coopération Universitaire et Scientifique de l'Ambassade de France au Cambodge

Merci votre excellence,

Bonjour à toutes et à tous,

L'Institut de Technologie du Cambodge est un institut de référence dans le domaine de la formation des ingénieurs et des techniciens. Il s'agit d'un rayonnement non seulement régional mais international. La France, à travers l'ambassade, s'efforce de renforcer le rayonnement international de l'ITC depuis 1993, à la fois par la formation et le soutien au partenariat de double diplomation délocalisée, également dans

la mobilité des étudiants que ce soit dans le cadre des programmes d'échange ou à travers des bourses de mobilité, que nous, l'ambassade de France, s'efforçons de développer chaque année. Et puis, il y a aussi le partage de connaissance par l'échange d'expertise, nous soutenons autant que ça se peut des missions de professeurs et chercheurs provenant de France et également l'envoi des professeurs et chercheurs de l'ITC vers nos établissements français pour ce genre de mission. Je dirais aussi que l'ITC a le rôle de dissémination et de valorisation via les journées scientifiques que l'ITC organise chaque année. Je tiens à saluer l'ampleur et la densité des activités à la fois en matière de formation et de recherche que l'ITC développe au cours du temps. Je ne citerai pas tous les outils de coopération que l'Ambassade de France met à la disposition aux établissements cambodgiens et en l'occurrence l'ITC. Nous avons soutenu des projets de 12 mois ou 2 ans. Je tiens aussi à souligner le soutien que nous souhaitons apporter au travers des ressources humaines. L'ITC a accueilli, je ne vais pas m'étaler sur cette partie triste, un expert technique international qui est devenu votre conseiller et qui n'est plus parmi nous, M. Bruno DAGUES. Vous savez également, consolider un partenariat, en accueillant nos instituts de recherche qui sont ici devant moi, l'IRD mais aussi le CIRAD, représenté par François Roger. Dans un environnement tout à fait international puisque vous accueillez aussi sur votre campus des partenaires de la région mais également d'Europe. Je vois le représentant de l'institution belge. Ici, je vois aussi le représentant de Jica du Japon. J'aimerais terminer avec mon dernier constat. En échangeant un instant avec son excellence Dr. OM Romny, je vois qu'il est toujours attaché à cet institut. Je me félicite de la qualité des ressources humaines de l'ITC qui sont formées, à la fois par le renforcement des capacités et également par les formations montées ici. Félicitations pour le partenariat international bien solide dont l'ITC est doté et je vous souhaite bonne continuation. Au nom de l'ambassadeur de France, je tiens à remercier l'ITC pour nous avoir invités à ce consortium international. Merci madame la Présidente.

S. E. Mme PHOEURNG Sackona, Ministre de la Culture et des Beaux-Arts et Présidente du Conseil d'Administration de l'ITC

Merci madame. Le soutien de la France contribue davantage à notre développement. Nous avons aussi le représentant des collègues belges qui sont partenaires de l'ITC depuis 1997. La parole est accordée maintenant à M. Michel VELEYSSEN.

M. Michel VERLEYSSEN, Université catholique de Louvain

Votre excellence Madame Sackona,
Monsieur Romny,
Monsieur Kimtho,
Et chers collègues de l'ITC,

C'est un privilège d'être parmi vous, accompagné, je pense cette année, d'une dizaine de collègues belges impliqués dans différents projets, entre les universités belges francophones et l'ITC. Comme vous le savez, le projet que nous appelons « Appui institutionnel », c'est un peu la colonne vertébrale de tous les projets de collaboration que mes collègues et moi-même menons depuis près de 20 ans avec l'ITC. Je sais que vous allez en parler aujourd'hui ou en tout cas que ça se trouve dans le rapport que nous venons de recevoir. Je voulais juste dire maintenant que nous sommes tous particulièrement heureux de pouvoir aujourd'hui continuer à accompagner le développement de l'ITC depuis pour ces années. Quel développement !!! Chacun d'entre nous qui travaillent depuis longtemps avec vous a vu l'évolution d'année en année des compétences de l'ITC de son organisation et ce à une vitesse phénoménale. J'espère qu'au fur et à mesure des évolutions de l'ITC, nous avons également pu faire évoluer nos outils de collaboration, à titre d'exemple l'appui institutionnel tel que nous connaissons aujourd'hui, ça n'a rien à avoir avec la collaboration il y a 10 ans et j'espère que cela convient à vos aspirations. Et en tout cas ça convient à nous, à mes collègues à moi-même qui nous présentons en mars cette semaine en est la meilleure preuve. Comme vous le savez, la coopération internationale est aujourd'hui menacée dans beaucoup d'endroits dans le monde soit pour des questions politiques pour des questions purement budgétaires et la Belgique malheureusement n'échappera pas ses restrictions budgétaires dans l'avenir. Nous sommes aussi ici pour affirmer que nous croyons fermement au futur des collaborations entre les universités belges l'ARES et l'ITC et que nous continuerons à défendre l'attribution de projet et de budget à cet effet. Nous comptons aussi sur vous pour cela parce que dans un contexte et de plus en plus en plus, excusez-moi, concurrentiel pour l'attribution des projets, il s'agit aussi de déposer auprès de l'ARES,

c'est auprès des universités belges sur leur budgets respectifs des projets de grande qualité que ce soit en recherche en enseignement ou en organisation comme l'appui institutionnel.

Merci pour votre attention.

S. E. Mme PHOEURNG Sackona, Ministre de la Culture et des Beaux-Arts et Présidente du Conseil d'Administration de l'ITC

Merci monsieur le professeur pour votre témoignage qui nous touche au fond du cœur. Je donne par la suite la parole à monsieur M. Nicolas MAINETTI, Directeur Asie-Pacifique de l'AUF.

Prof. M. Nicolas MAINETTI, Directeur Asie-Pacifique de l'AUF

Merci madame la ministre, votre excellence. Juste quelques mots au nom de l'Agence Universitaire de la Francophonie, que je représente pour l'Asie Pacifique. J'en profite pour vous dire aussi que l'ITC est un fleuron francophone scientifique, en Asie Pacifique mais aussi à l'international et dans d'autres régions. C'est un exemple qui d'une part est cité pour la conception de sa gouvernance et le consortium d'aujourd'hui en est la preuve de réunion d'experts internationaux et de spécialistes et aussi pour la qualité de ses résultats et de ses réalisations que l'AUF mène avec l'ITC et les perspectives puisque l'AUF est définie par des stratégies qui sont quadriennales et que nous préparons actuellement notre assemblée générale près de tous les quatre ans et qui aura lieu cette année à Dakar au mois de novembre et qui va définir nos actions et la stratégie pour les années 2025 à 2029.

Tout d'abord dire qu'on est très heureux que l'ITC s'est inscrit dans notre stratégie actuelle qui consistait à mettre l'accent sur l'employabilité et c'est ainsi que nous avons un centre d'employabilité francophone un CEF qui est hébergé et qui est porté donc par l'ITC dans ses locaux et nous travaillons actuellement donc sur la province de KEP sur la ville de KEP, à l'ouverture d'un autre CEF, un CEF de plus sur le campus de l'ITC et ça c'est très intéressant pour renforcer la place de la Francophonie comme outil d'insertion professionnelle. Nous nous souhaitons aussi mettre l'accent sur l'accélération de la transition numérique avec un certain nombre de dispositifs qu'on a déployé mais dans l'ITC qui a été tout de suite volontaire et à apporter ses actions et en particulier sur la promotion des ressources éducatives libres que nous avons menée. Une expertise régionale dont le rapport est finalisé et va sortir prochainement mais qui est porteur de beaucoup d'avenir et de projet sur le sur le Cambodge et sur l'ITC. Nous souhaitons aussi nous avons déposé récemment avec les ambassades de France qui sont qui sont les porteurs de ce projet de France au Cambodge pour Laos et au Vietnam un projet qui s'appelle Fonds Equipe France (FEF) et l'industrie 4.0 et l'utilisation des enjeux numériques pour l'industrie 4.0 au niveau de l'enseignement donc ça c'est quelque chose d'innovateur auquel on pense beaucoup et donc j'espère que c'est un projet qui aboutira et que l'ITC là aussi bénéficiera de ses actions. Et toujours dans le cadre de tous les enjeux numériques, c'est plutôt du côté recherche nous sommes en train de pousser un consortium de recherche sur l'utilisation des enjeux numériques et de l'intelligence artificielle dans les situations extrêmes de gestion et là aussi avec le réchauffement climatique et les catastrophes climatiques pour lesquels il y a beaucoup de choses à faire et donc là aussi j'espère que l'ITC sera un membre éminent du Consortium de recherche.

Un autre un autre point sur lequel nous mettons beaucoup d'accent et au lycée est un partenaire très précieux concerne les entrepreneuriats et l'innovation et en particulier je voudrais citer le « programme entreprendre » qui a un programme intergouvernemental porté par l'AUF, essentiellement sur des pays d'Afrique et de l'océan Indien Madagascar et donc le Cambodge a été le premier pays d'Asie a accepté d'intégrer ce programme qui a été lancé l'année dernière et qui vise en particulier la reconnaissance du statut d'étudiant entrepreneur et donc là l'ITC bien entendu, nous appuie beaucoup dans ce programme et donc on espère qu'à l'avenir l'accent sera mis sur les actions autour de l'innovation et de l'entrepreneuriat en particulier je pense au concours SCAPA qui veut dire Smart Campus Asie-Pacifique, actuellement porté par l'Université de Danang mais qu'on souhaite internationaliser et donc cette année nous l'organisons à Danang mais j'espère qu'en 2026, il pourra être organisé à l'ITC au Cambodge et de façon concomitante au sommet de la Francophonie qui se tiendra au Cambodge, en 2026. Là, c'est l'occasion de valoriser les actions et les possibilités d'entrepreneuriat et les projets d'étudiants qui sont aussi appuyés par les structures d'appui et d'accélération.

Enfin, je voudrais citer le programme PIMEF que nous souhaitons venir en appui à la mobilité internationale étudiante nationale. PIMEF, c'est le programme international de la mobilité et d'employé francophone qui va être lancé à l'automne 2025 et se déployer sur les quatre prochaines années et j'espère là aussi que l'ITC sera un partenaire précieux puisqu'il s'agit d'accueillir et d'envoyer sur une base d'échange et de réciprocité. Je remercie vraiment l'ITC pour toutes ces belles collaborations et donc je suis persuadé que nous avons encore un bel avenir et je vous félicite en tous les cas pour les succès passés.

S. E. Mme PHOEURNG Sackona, Ministre de la Culture et des Beaux-Arts et Présidente du Conseil d'Administration de l'ITC

Merci monsieur le directeur. Vous savez que l'ITC a beaucoup développé la formation initiale, continue et la recherche. Nous avons beaucoup d'institutions qui sont nos partenaires.

Je donne maintenant la parole à Monsieur VAUDRON Paul, chercheur de l'ITC et représentant de Monsieur Luc LE CALVEZ, représentant de l'IRD au Cambodge.

M. Paul VAUDRON, chercheur et remplaçant de M. Luc LE CALVEZ, représentant au pays de l'IRD

Mes respects à son excellence Phoeurng Sackona et à leur Excellence, Mesdames et Messieurs ;

Nos excuses pour l'absence de Luc Le Calvez, Représentant de l'IRD au Cambodge, qui a été requis pour une réunion à l'Ambassade de France. Il nous rejoindra au repas de midi.

Je suis Paul Baudron, chercheur IRD en accueil à l'ITC depuis août 2023. Plusieurs de mes collègues sont également présents aujourd'hui.

L'IRD est l'Institut de Recherche pour le Développement, un institut public français de recherche partenariale. Il est impliqué dans plus de 50 pays, notamment en Asie du Sud-Est, en phase avec les objectifs de développement durable (ODD).

Plusieurs chercheurs de IRD sont disponibles aujourd'hui. Mes collègues et moi-même sommes disponibles pour toute discussion. Je suis Paul Baudron, chercheur de l'IRD, en accueil à l'ITC depuis août 2023.

L'IRD apprécie grandement la collaboration quotidienne avec l'ITC, qui nous accueille depuis 2019

- L'ITC accueille 5 des 9 chercheurs IRD en affectation au Cambodge, plus 10 à 20 agents recrutés localement dans le cadre des différents projets de recherche.
- Cette collaboration croissante s'est traduite par l'établissement en 2020 d'un bureau de représentation de l'IRD au Cambodge, que l'IRD a choisi d'installer à l'ITC

Nos missions à l'ITC visent à accompagner le renforcement de la capacité en recherche via :

- Formation (accompagnement à la recherche par la recherche)
- Structuration de la recherche (accompagnement à la création de laboratoires)
- Création d'infrastructures de recherche

La collaboration s'est structurée depuis 2019 sous la forme de la création de 4 laboratoires, co-dirigés par des chercheurs IRD et ITC :

- Healthy-Rice : laboratoire de santé et qualité du riz
- Coastal and Wetland Environmental Research lab: sur les ressources en eau
- ECOLAB: sur le fonctionnement écologique et durable des sols
- KHEOBS - Khmer Earth Observation Laboratory: sur le suivi de l'environnement et du climat par satellite

Pour accompagner ces laboratoires sur le long terme, l'IRD met en place différents dispositifs qui ont été implémentés à l'ITC :

- JEAI (Jeunes équipes de recherche) sur 3 ans : afin de monter une équipe de recherche ITC et déployer des activités scientifiques
- LMI (laboratoire mixte) sur 5-10 ans : initiatives multi-partenariat qui connectent différents laboratoires, tel que le LMI LEAD sur la riziculture durable

D'autres mécanismes IRD permettent de soutenir la formation et l'organisation de conférences.

- Une quinzaine d'initiatives (formations et conférences) sur les trois années passées, qui ont rassemblé une trentaine d'étudiants et de partenaires.
- Les chercheurs seniors interviennent également dans la formation initiale à l'ITC.

L'IRD permet également d'accéder à des financements particuliers de la France :

- Via l'Agence Nationale de la Recherche, via l'Europe et particulièrement via l'Ambassade de France au Cambodge (FEF), l'Agence Française de Développement (AFD) et potentiellement l'AUF
- Pour accompagner la mise en place de laboratoires, d'infrastructures et de projets de recherche.
- Pour accompagner de jeunes chercheurs
 - o En 2024-2025 : 9 étudiants Master et 4 PhD
 - o Plusieurs diplômés sont maintenant lecturer ou researcher à l'ITC
 - o Plusieurs se sont démarqués à l'international, notamment Dr Kakada Oeum au trophées de l'innovation

Nous apprécions grandement la collaboration quotidienne avec l'ITC. Nous sommes enthousiastes à l'idée de poursuivre son développement et sommes pleinement investis pour soutenir et collaborer avec l'ITC, dans les années à venir.

Les ateliers de cet après-midi promettent des échanges riches et ouverts

S. E. Mme PHOEURNG Sackona, Ministre de la Culture et des Beaux-Arts et Présidente du Conseil d'Administration de l'ITC

Merci monsieur et je donne la parole à M. François Roger, directeur régional du Centre international de recherche agricole pour le développement

M. François Roger, directeur régional du Centre international de recherche agricole pour le développement (CIRAD)

Merci beaucoup pour cette opportunité de prendre la parole.

Le CIRAD est présent en Asie du Sud-Est depuis une trentaine d'années, notamment au Cambodge, au Laos, en Thaïlande et au Vietnam. En Birmanie, nous maintenons encore quelques activités, malgré un contexte difficile. Nous développons également des actions en Indonésie et aux Philippines, et cherchons à établir des coopérations plus étroites avec la Chine sur certains thèmes.

Au Cambodge, le CIRAD compte actuellement neuf chercheurs, répartis autour de plusieurs grands axes thématiques :

- L'agroécologie
- L'aquaculture
- La gestion de la ressource en eau
- L'approche « Une seule santé » (One Health) — en partenariat notamment avec l'Institut Pasteur du Cambodge.

Il y a une chercheuse basée ici à l'ITC, spécialisée en agroécologie. C'est l'occasion de remercier l'ITC pour la collaboration de longue date que nous avons pu construire ensemble.

Le CIRAD collabore également avec d'autres établissements d'enseignement supérieur au Cambodge, notamment l'Université Royale d'Agriculture et l'Université de Battambang.

Nous souhaitons continuer à renforcer ces partenariats, en particulier autour de deux piliers majeurs que sont l'agroécologie et l'approche One Health. Nous pensons qu'il est essentiel de créer des ponts entre ces deux approches, et de ne pas réduire One Health à une simple étude des maladies animales transmissibles à l'humain. Il s'agit aussi d'intégrer les pratiques agricoles, les systèmes alimentaires, et la santé des écosystèmes dans une vision plus intégrée, où la santé des plantes, des sols, des animaux et des humains est interdépendante.

Nous espérons que ce consortium contribuera à renforcer cette interdisciplinarité et à favoriser de nouvelles synergies entre nos institutions.

Merci beaucoup.

S. E. Mme PHOEURNG Sackona, Ministre de la Culture et des Beaux-Arts et Présidente du Conseil d'Administration de l'ITC

Merci M. François Roger, directeur régional du Centre international de recherche agricole pour le développement.

Comme vous le savez, on a fait le tour en termes de partenariat. Avant de continuer, je voudrais rebondir ce que la représentant de l'ambassade de France vient d'évoquer. Je voudrais vous rappeler l'un de nos meilleurs amis, M. Bruno DAGUES qui était le dernier conseiller de l'ITC. C'était un ami de Toulouse qui aimait vraiment le Cambodge et l'ITC. Il a décidé de passer sa vie ici. On a admiré sa décision de nous quitter définitivement. L'ITC l'a accompagné jusqu'à la fin de son séjour au Cambodge. Pour lui rendre hommage, je vous demande de vous lever pour une minute de silence.

Merci beaucoup. Ensuite, Dr. PO Kimtho va présenter le suivi des avis du Consortium et les décisions du CA 2024.

S. E. Prof. Dr. PO Kimtho, Directeur de l'ITC

Merci Madame. Je vous présente en premier lieu le suivi du Consortium international 2024 et en second lieu les événements marquants de l'ITC.

Le suivi des avis du Consortium et des décisions du CA 2024:

No	Avis du Consortium et des décisions du CA 2024	2024-2025
1	Valorisation de la transversalité des cours entre les départements	En réalisation
2	Création de: Master of Architectural Engineering (GS)	Réalisé
3	Création de : Artificial Intelligence Engineering and Cybersecurity (GIC-International Program)	Réalisé
4	Création de: IT Network and Programming (GIC-Associate)	Réalisé
5	Création de : Industrial Engineering (GIM-Associate)	Réalisé
6	Création de : Geotechnical Engineering (GGG-Associate)	Réalisé
7	Changement du nom: Materials Science and Structure” to “Materials and Built Environment” (RIC)	Réalisé
8	New PathWay of ECAM LaSalle “Second years of International Program can go directly to 3rd year at ECAM LaSalle” (ITC-ECAM-Kasetsart University)	Réalisé

Les événements marquants

Pour cette partie, permettez-moi de vous la présenter en anglais. In 2025 there were so many events but today I present some of the most important ones.

Pour ne pas alourdir ce compte-rendu, permettez-moi de ne pas tout transcrire. Je peux vous citer seulement les grands titres :

- Lancement du réseau CCUN « Cambodian Cyber University Network ;
- Les 13^{ème} Journées scientifiques
- Fête de 60 ans de l'ITC
- 3^{ème} Conférence Internationale sur la technologie de la Terre et du géo-environnement 2024
- Symposium International sur « Life Mechatronics 2024 »
- Signature du MoU avec le Ministère des Ressources en eau et de la météorologie
- Construction du Centre de recherche et de transfert de technologie
- Ouverture d'un autre campus à Kep
- Récompenses aux groupes de robot
- Signature du MoU avec l'université de Central Missouri, USA
- Signature du MoU avec l'université de Macquarie, Australie
- Inauguration du Centre de formation en climatisation et signature du protocole d'accord avec PANASONIC

M. SOY Ty, Directeur adjoint de l'ITC, chargé des affaires académiques

M. SOY Ty présente les activités des études 2024-2025.

Pour ne pas alourdir le texte, on n'en cite que les grandes lignes de sa présentation.

- Formation des ingénieurs et techniciens
- Formation du 3^{ème} cycle
- Activités du Centre E-learning à l'ITC
- Renforcement des capacités
- Partenariat et collaboration locaux
- Contribution sociale
- Accès aux ressources électroniques

M. BUN Long, Directeur adjoint de l'ITC, chargé de coopération et de recherche

M. BUN Long présente les activités du centre de recherche et d'innovation (RIC).

Pour ne pas alourdir le texte, on n'en cite que les grandes lignes de sa présentation.

- Contexte du RIC
- Infrastructures de recherche
- Fonds de recherche attribués pour 2024-2025
- Publication des résultats de recherche
- Faits saillants des impacts de recherche
- Recherche sur la qualité de l'air et gestion des risques-Projet SATREPS
- Centre de recherche Côtière du Cambodge
- Projet d'approvisionnement en eau et d'assainissement en province
- Plateforme de recherche et de formation sur les réseaux électriques du Cambodge
- Projet ARES
- Bureau d'incubation Techno
- Statut National d'étudiant entrepreneur
- Techno Innovation Challenges (Saison 7)
- COOPERATION ET PERFECTIONNEMENT
- Perfectionnement de courte durée à l'étranger

S. E. Mme PHOEURNG Sackona, Ministre de la Culture et des Beaux-Arts et Présidente du Conseil d'Administration de l'ITC

Merci beaucoup. Je crois que ces deux présentations vous apporte des informations liées à un certain nombre d'activités réalisées en 2024-2025. Si vous avez des questions ou remarques. N'hésitez pas.

Mme Assia TRIA, Directrice de l'IMT Mines Alès

J'ai une question concernant la propriété intellectuelle et le dépôt de brevet dans la présentation en fait, il n'y avait rien qui concernait ce sujet. Est-ce que ça veut dire que vous ne déposez pas et si vous déposez est-ce qu'il y a une politique incitative pour les chercheurs à déposer un brevet à créer de la propriété intellectuelle et puis à valoriser aussi ce patrimoine pour l'Institut de Technologie du Cambodge.

M. BUN Long, Directeur adjoint de l'ITC, chargé de coopération et de recherche

Yes, madam, Intellectual property document is developing with the support from CapFish-UNIDO. They also they already provided the template of the IP document and now we are adapting that IP document to be the guideline for ITC. But frankly speaking, we are at the early stage of IP in Cambodia. So even if we developing something new, it costly to fall the IP to relevant institute but we believe it's very important because since now we have many development projects. So, IP is very important. We start to have some small issue related to the intellectual property sometime between students and professor and sometime between University and University. So, in conclusion I can say that we are still in the very early stage so hopefully we can finish our guideline very soon.

Mme TRAN Thi Anh-Dao, Attachée de Coopération Universitaire et Scientifique de l'Ambassade de France au Cambodge

J'ai une question d'éclaircissement concernant les statistiques. A la page 58, vous dites qu'il y a 28 docteurs au total et ensuite, de 2022-2023, ils étaient 57. Vous avez donc les doctorants qui sont encore là ? Je ne comprends pas bien ces tableaux.

M. SOY Ty, Directeur adjoint de l'ITC, chargé des affaires académiques

En fait, en 2023-2024, il y a eu 28 docteurs diplômés et les nouveaux doctorants pour 2024-2025 sont 57. En fait, ce tableau regroupe les étudiants actuels et ceux de l'an dernier.

M. Timoteo CARLETTI, Université de Namur, Belgique

Je voudrais venir sur la question précédente en fait à propos des brevets donc dans la première institutionnelle on s'occupe entre autres des brevets mais surtout ce qu'on fait c'est essayer d'établir des contrats et les brevets c'est pas forcément ce qui va rapporter le plus. C'est difficile de rentabiliser un brevet mais à toute une série d'autres contrats qui sont liés au transfert de technologie des contrats d'exploitation des contrats de confidentialité et on a une association pour l'instant avec une société de conseiller juridique externe qui met en place tous ces contrats pour l'ITC et ma croyance que tôt ou tard l'épaisseur d'intérêt envisager la possibilité d'un service juridique interne et l'ITC parce que je pense qu'il y a peu d'universités qui n'ont pas ça. Donc, je sais pas combien quels sont les besoins réels du Cambodge à ce niveau mais je pense que ça peut être quelque chose pour implémenter tôt ou tard.

Dr. BUN Kim Ngun, Directeur adjoint de l'ITC, chargé des projets

Dr. BUN Kim Ngun va présenter la partie perspectives et stratégies

S. E. Mme PHOEURNNG Sackona, Ministre de la Culture et des Beaux-Arts et Présidente du Conseil d'Administration de l'ITC

Merci beaucoup. Félicitations pour tout ce que l'ITC a réalisé et surtout de nouvelles perspectives et stratégies. On voit que cette année, on ne voit pas la demande d'ouverture de nouveaux programmes. J'ai vu la mise en place d'un nouveau programme pour le département d'architecture. Nous voyons par contre de nouvelles propositions qui viennent renforcer les programmes qui existent déjà. Ça, c'est une remarque de ma part. Je souhaite que ce soit bien organisé.

Pour cet après-midi, je vois pas mal de modifications de programmes qui ont besoin des remarques et recommandations des membres du Consortium. J'espère que cette discussion en binôme collègue-itc et partenaires internationaux peuvent travailler ensemble pour trouver un consensus.

Pour le rapport du CA, je vois que ces recherches sont couteuses, vous pouvez mettre dans ces budgets dans le budget consolidé ou de fonctionnement du rapport financier du CA. Vous pouvez mettre en pourcentage de ces budgets parmi d'autres. Ça vaut le coup que ce soit visible. C'est tout simplement ma suggestion et c'est à vous de voir monsieur le directeur pour la réunion du CA en juin.

Pour l'internat sur le nouveau campus, selon SEM le directeur, il est destiné non seulement aux étudiantes mais aussi aux enseignants de l'ITC.

Voilà mes remarques. Si vous avez des questions, elles sont les bienvenues...

M. Yann VAUDIN, CEO Voltra Co., Ltd

J'ai une petite question. D'abord, félicitations pour le nouveau campus de l'ITC à côté du monument gagnant-gagnant. Je vois qu'il y aura une grosse capacité et qu'il se trouve à 20km de Phnom Penh. Est-ce que vous prévoyez des bus qui servent de navettes entre le campus principale et là-bas? Est-ce que vous en avez parlé avec la municipalité de Phnom Penh? Parce que les étudiants ne peuvent pas faire aller-retour sur la Nationale 6 tous les jours.

S. E. Mme PHOEURNNG Sackona, Ministre de la Culture et des Beaux-Arts et Présidente du Conseil d'Administration de l'ITC

Merci pour cette question. Oui, je reconnais que la circulation à cette destination n'est pas facile. Non seulement pour l'ITC mais aussi pour l'Université des Beaux-Arts. Cette zone est de plus en plus peuplée et pas mal d'institutions ont déménagé là-bas. On va demander au ministère de l'éducation et à la municipalité de Phnom Penh pour que les lignes de bus publics aillent jusque là-bas. Pour le moment, nous avons une seule ligne 6 qui va jusque là-bas.

M. Michel VERLEYSEN, Université catholique de Louvain

Oui pour la même remarque. Il s'agit des mêmes étudiants et professeurs qui sont sur les deux campus. Pour moi, c'est un peu compliqué si le chercheur travaille sur les deux campus en même temps.

S. E. Prof. Dr. PO Kimtho, Directeur de l'ITC

Oui, c'est une bonne question. Je vais réfléchir et discuter avec la direction comment on peut mettre en marche ce nouveau campus. Pour moi, pour les programmes des techniciens, comme vous le savez. On a deux nouveaux programmes : en génie informatique et génie industriel. Ils seront là-bas. Nous allons mobiliser certaines unités de recherche mais on ne sait pas encore lesquelles.

S. E. Mme PHOEURNNG Sackona, Ministre de la Culture et des Beaux-Arts et Présidente du Conseil d'Administration de l'ITC

Quelle que soit la solution, on essaye de réduire dans la mesure du possible le déplacement des étudiants et professeurs. L'Université Royale des Beaux-Arts (URBA) a aussi ce problème. Elle a deux campus, l'un à côté du Palais Royal et l'autre dans la zone dont on est en train de parler. Les premières et deuxième années vont là-bas.

S. E. Dr. OM Romny, Secrétaire d'État au Ministère de l'Éducation, de la Jeunesse et des Sports et Directeur honoraire de l'ITC

Je dirais que les 3^{ème} et 4^{ème} années méritent d'être là-bas parce que nous avons pas mal de laboratoires bien équipés. Je ne crois pas que les moyens de transports ne nous posent pas de problèmes parce que nous avons les campus de l'ITC, de l'URPP, de l'ERA et du ministère de l'économie et des finances. C'est donc sûr et certain que les autorités y pensent et trouvent une solution.

DISCUSSIONS DANS LES DÉPARTEMENTS RESPECTIFS

Le 27 mars 2025 / March 27, 2025

Présentation des synthèses par département / Presentation of summaries by department

Plan de présentation des synthèses

- 1) Département of Applied Mathematics and Statistics (AMS)
- 2) Département de génie Informatique et Communication (GIC)
- 3) Département de GTR
- 4) Faculté de Génie Civil (Civil, Architecture, Transport) (GCI)
- 5) Département de GGG
- 6) Département de GEE
- 7) Département de GIM-ECAM
- 8) Faculté de génie Chimique et Alimentaire (GCA)
- 9) Faculté d'Hydrologie et des Ressources en Eau (GRU)
- 10) Département de Tronc Commun (TC)
- 11) École Doctorale (GS)
- 12) Centre de Recherche et d'Innovation (RIC)

S. E. Mme PHOEURNNG Sackona, Ministre de la Culture et des Beaux-Arts et Présidente du Conseil d'Administration de l'ITC

On a écouté toutes les présentations. Est-ce que vous avez remarques ou commentaires?

M. DEBASTE Frédéric, Université Libre de Bruxelles

Oui, madame la présidente. J'ai vu certains départements parler de l'importance des relations avec les entreprises. Je crois que vous avez raison. Nous, on est là pour vous aider à aller dans ce sens-là, non seulement à court-terme mais aussi à long-terme. Mais je suggère que AMS et GGG renforcent un plus les relations avec le secteur privé.

M. Michel VERLEYSEN, Université catholique de Louvain

Merci Madame Sackona. Juste pour rebondir ce que Frédéric vient de dire. Dans les discussions hier, on a beaucoup discuté des valorisations des résultats de recherche et des liens avec le monde des entreprises.

On beaucoup insisté dans notre groupe sur la nécessité que pour arriver un jour à avoir toute la chaîne entre la recherche fondamentale, la recherche appliquée, le prototypage là les possibilités éventuellement de collaboration avec l'entreprise ou de commercialisation d'un certain nombre d'invention ou de réalisation. En fait, c'est plus qu'une chaîne qui ne peut pas être aux mains d'une même personne. On disait un peu voilà en rigolant hier mais un chercheur dans le monde académique, ça reste un chercheur dans le monde académique. C'est pas quelqu'un qui peut exploiter des résultats. Il s'agit de deux mondes différents. Il faut donc aider le chercheur à réaliser toute cette chaîne de transmission entre les résultats de la recherche et les possibilités d'exploitation. et donc c'est sur ça que c'est un nombre de collègues travaillent actuellement avec l'ITC alors que ce soit dans l'aspect institutionnel ou dans d'autres projets. On a vu hier plusieurs initiatives. Donc, Frédéric a insisté sur le fait que ces initiatives doivent être coordonnées. On a un petit peur qu'un projet financé par l'ARES et un autre qui réfléchit pas tout à fait toujours assez de coordination entre ces projets. Donc, ça c'est une chose mais je pense qu'il est aussi extrêmement important que l'ITC ait une vision à long terme de ce qui va arriver dans cette chaîne de valorisation et en fait il y a pas de miracle si on veut que cette chaîne de valorisation fonctionne, il faut un moment qu'il y ait à l'ITC, à terme, qui s'occupe des aspects de valorisation, des aspects commerciaux, des aspects légaux, de la propriété intellectuelle et je pense que c'est un c'est un mâle dans le monde académique aujourd'hui partout dans le monde, les universités commencent à avoir des cellules de valorisation pour aider le chercheur à réaliser ce pas vers le monde de l'entreprise et donc il faut il faut vraiment avoir cette vision à long terme et se dire que l'ITC devra prendre ça en charge. Il faudra investir et c'est sur et certain qu'il y aura un retour important vers l'ITC.

S. E. Mme PHOEURNG Sackona, Ministre de la Culture et des Beaux-Arts et Présidente du Conseil d'Administration de l'ITC

Merci beaucoup pour cette intervention. Vous savez, c'est pas facile. Il faut travailler et avoir de l'expérience. J'avoue que c'est tout nouveau pour l'ITC. L'ITC s'occupe de la formation initiale, de la formation continue, et de la recherche. On a besoin de votre appui ou dans la région, de Singapour, de Thaïlande. C'est important de commencer dès maintenant. C'est tout à fait possible parce que nous avons tous les moyens informatiques qui nous aident. Monsieur le Directeur, notez bien cela.

En ce qui me concerne, je vois que quand j'étais ici à l'ITC, les infrastructures de l'ITC n'étaient pas suffisantes. Il manquait pas mal de choses. Mais à l'heure actuelle, avec les financements de plusieurs bailleurs de fonds, on en a de plus en plus.

Au niveau des ressources humaines, le ministère de la culture et des Beaux-Arts a besoin des chercheurs de l'ITC pour nous aider pour la rénovation de certains sites et temples de Preah Vihear, par exemple. Nos partenaires internationaux ont beaucoup apprécié la qualité du travail de nos chercheurs de l'ITC. Mais j'ai une chose à vous demander aussi. Pendant la pandémie du Covid-19, l'ITC a développé pas mal de cours en ligne pour lui-même et aussi pour le ministère de l'éducation, de la jeunesse et des sports. Cependant, le Covid n'est plus avec nous. Nous cherchons donc à valoriser les cours en présentiel sauf si le professeur est en France ou ailleurs.

Je vois que dans le département GCI, ce type de cours est prévu en 2027. Je me demande donc pourquoi.

M. LAY Hég, Doyen de la faculté de génie électrique et chef de département de génie informatique et communication (GIC)

Yes, we have some courses offered online as part of our CCUN. We need to send programs that will be converted to e-learning. In fact, this includes Agro-industry, Data Science, and Computer Science. We want to convert the master's program to two years, not five. This is not the program for engineers.

S. E. Mme PHOEURNG Sackona, Ministre de la Culture et des Beaux-Arts et Présidente du Conseil d'Administration de l'ITC

For this master's program, are you taking only online courses for 2 years?

M. LAY Hég, Doyen de la faculté de génie électrique et chef de département de génie informatique et communication (GIC)

Yes, for the lecture, we support to do it online for the blended model, for the lab activity, they need come to the laboratory.

S. E. Mme PHOEURNG Sackona, Ministre de la Culture et des Beaux-Arts et Présidente du Conseil d'Administration de l'ITC

When you discussed with your colleagues in the Consortium yesterday afternoon, what were their ideas?

M. SIM Tepmony, Directeur de l'École doctorale

May I clarify something, Madam? Good morning, everyone. I'm sitting the course online actually we plan to develop the coexisting online and on site. So, we use the blended method. So, this mean that something that can provide to students that they can join from distance and do and for all the practical purpose, they have to come to ITC. So I think in these initiative, we try to develop the guidelines. It's not that we can make the quality in our hand. So, the I think at least the document will be produced and we have a project to support and we will see if eventually the degree can be done through this but now we will not have any commitment to the degree. We just provide simultaneously the course online available and the activity on site so that we can attract more students to join and this is the initiative of from the Samdech Prime minister also, to make this available to those who already have job or work from ministry from other something like that so it's for equity purpose. Thank you.

S. E. Mme PHOEURNG Sackona, Ministre de la Culture et des Beaux-Arts et Présidente du Conseil d'Administration de l'ITC

Yes, I understand very well, but we also need to think about quality. Attracting students is one thing, and maintaining the quality of training must go hand in hand. One cannot exist without the other. I well understand now. This master's degree is intended for people who work and who don't have time to come and study on site most of the time.

I agree but do it carefully otherwise it can destroy ITC's reputation. Why am I mentioning this? Because now we have many universities competing with ITC.

Okay, now, I let GEE present their discussion results.

Mme Isabelle BOKHARI, Conseillère du vice Premier ministre et Ministre de l'Éducation, de la Jeunesse et des Sports

Madame Sackona, Monsieur le Directeur et chers collègues, Merci. Comme madame Sackona l'a dit, je viens de rejoindre les travaux donc je n'ai pas de prétention à apporter des choses extraordinaires. Les spécialistes, c'est vous. Tout simplement deux points : la conférence sur l'éducation annuelle au Cambodge a eu lieu tout récemment et son excellence HANG Choun Naron, vice Premier ministre et ministre de l'Éducation, de la Jeunesse et des sports, a bien précisé au côté d'autres membres du gouvernement que l'un des objectifs principaux de l'éducation au Cambodge, était justement la transition ou en tout cas aider à la transition économique du Cambodge pour qu'il atteigne le niveau de revenu intermédiaire supérieur. J'ai été ravie d'entendre la notion de d'approche par compétence, bien sûr, qui fait référence au métier et donc aussi en filigrane à l'insertion professionnelle. Le docteur HANG Choun Naron a aussi souligné que le fait qu'il fallait intégrer encore davantage à communiquer parentale. La communauté scolaire et la communauté parentale dans le sens où effectivement, ce sont les parents et on l'a vu dans deux représentations la visibilité des programmes de l'enseignement supérieur disponible au Cambodge mais pas toujours forcément visibles dans les provinces du Cambodge les possibilités de financement non plus, voilà. Choisir des secteurs, oui effectivement donc je ne sais pas bien sûr il y a plusieurs possibilités mais peut-être penser au secteur prioritaire de développement du Cambodge et accès donc les domaines de recherche à ces domaines de développement souhaités une suggestion, voilà. Je m'arrêterai là. Je vous remercie beaucoup. J'ai appris beaucoup de choses aussi de vous. Bonne fin de séjour à tout le monde. Merci.

S. E. Mme PHOEURNG Sackona, Ministre de la Culture et des Beaux-Arts et Présidente du Conseil d'Administration de l'ITC

Merci madame. Oui, tout à fait, on travaille dans ce sens-là : le développement des ressources humaines, de l'économie etc. Merci pour votre remarque.

Madame la Présidente a remercié tous les membres du Consortium qui ont consacré leur précieux temps à une riche discussion du Consortium international ITC-2025 et elle précise que la date de la réunion du Conseil d'administration sera le 26 juin 2025 et que le prochain Consortium international aura lieu la 4^{ème} semaine du mois de mars 2026.

Elle a terminé son discours par accorder une importance particulière de l'expertise de tous les membres du Consortium en faisant allusion au concept de Bouddha qui dit que marcher sans lumière devant soi, c'est pas facile. Elle voulait considérer tous les membres du Consortium comme une lumière fondamentale dont « les jeunes de la nouvelle génération » de l'ITC ont besoin pour que l'ITC puisse garder sa bonne formation et une recherche plus avancée à l'échelle nationale, régionale et internationale.

Les trois points auxquels la réunion a accordé son importance sont les suivants :

- 1) Développer plus de relations et d'actions avec le secteur privé, surtout le GGG et l'AMS ;
- 2) Déterminer les composantes qui méritent de déménager au nouveau campus ;
- 3) Rendre faciles et efficaces les transports à destination du nouveau campus en contactant les autorités compétentes.

Il est à noter que les facultés et les départements n'ont présenté que les perspectives et les actions à venir dans les facultés et les départements respectifs pour lesquelles les membres du Consortium n'avaient pas d'objection.

Par ailleurs, en ce qui concerne le changement et la modification des programmes pour l'année à venir, le tableau suivant illustre les détails et les avis des membres du Consortium.

No	Avis du Consortium 2025/département GEE	Département	AVIS
1	New course for 3 rd Year semester 1 (C:16 ; TD:0 ;TP:0) Mastering skills by using IA Tool	GEE	Favorable
2	Combine Analog Filter with Analog Electronics for 3 rd Year semester 1 (C:32 ; TD:16 ;TP:16) Fundamental of Electronics	GEE	Favorable
3	Energy Conversion Move to 4 th Year Semester II (C:32 ; TD:16 ;TP:32)	GEE	Favorable
4	Power System Analysis and Optimization Move to 4 th Year Semester I (C:32 ; TD:16 ;TP:32)	GEE	Favorable
5	Data Science : Modify 7 courses in total, in which 4 courses modified names, 1 course is moved to semester 2, 1 course is modified the duration, and 1 course is a new course.	AMS	Favorable
6	Financial Engineering : All courses in year 3 are the same name in Data Science program. Some courses in year 4 and year 5 are the same name in Data Science program.	AMS	Favorable
7	Traffic Management and Modeling will be replaced by Traffic Engineering, Management and Simulation (I3-S2)	GTI	Favorable
8	Transport Systems of Freights and Traveler will be replaced by Transport Modeling and Planning (I3-S2)	GTI	Favorable

Annex 2. Minutes of meeting of the 32nd Board of Trustees Meeting on 27 June 2024.



COMPTE-RENDU DE LA REUNION DU 32^{EME} CONSEIL D'ADMINISTRATION DE L'ITC, LE 27 JUIN 2024, A PHNOM PENH

Membres de droit

1. S. E. Mme PHOEURNNG Sackona, présidente du conseil d'administration et ministre de la culture et des beaux-arts
2. S. E. M. PELLET Jacques, ambassadeur de France au Cambodge
3. S. E. M. UENO Atsushi, ambassadeur du Japon au Cambodge
4. S. E. M. OM Romney, secrétaire d'État au ministère de l'éducation, de la jeunesse et des sports
5. S. E. Mme PEN Chhorda, secrétaire d'État du ministère des mines et de l'énergie
6. S. E. M. CHOU Kimleng, secrétaire d'État du ministère de l'économie et des finances
7. S. E. M. PO Kimtho, directeur de l'ITC
8. M. MAINETTI Nicolas, directeur de l'AUF Asie-Pacifique
9. M. LAY Méng Sun, directeur de la SKD et représentant du secteur privé
10. M. DEBASTE Frédéric, représentant de l'ARES-ex CUD et des universités francophones de Belgique

Membres invités

11. M. PROTIN Ludovic, Directeur honoraire de l'ITC
12. M. VINCENT Pierre, Conseiller de Coopération et d'action culturelle de l'Ambassade de France et directeur de l'Institut Français du Cambodge
13. Mr. KAZUMASA Sanui, Chief Representative of JICA Cambodia Office, AUN/SEED-Net
14. M. KOICHIRO Watanabe, Senior Advisor of JICA (Online)
15. M. JUN-ICHI Takada, Vice-president of Tokyo Institute of Technology (Online)
16. Mme MARTIAL Adèle, Country Representative of IRD and Representative of Consortium
17. M. MAUSSION Pascal, Vice-président des Relations Internationales INP-Toulouse
18. M. IM Kravong, Responsable Antenne AUF, Phnom Penh
19. Mrs. MIYAKE Chiho, Industry Linkage / Project Coordinator of JICA Project for Strengthening Engineering Education and Research for Industrial Development in Cambodia (LBE Project)

Direction de l'ITC et ses coéquipiers

20. M. SOY Ty, Directeur adjoint de l'ITC
21. Dr. BUN Kim Ngun, Directeur adjoint
22. Dr. NGUON Kollika, Directeur adjoint
23. Dr. BUN Long, Directeur adjoint
24. Dr. CHUNHIENG Thavarith, Conseiller chargé de la coopération et de la recherche

25. M. NUTH Sothân, Conseiller de l'ITC, hargé de la pédagogie et des études
26. Dr. OR Chanmoly, Directeur du centre de recherche et d'innovation (RIC)
27. Dr. SIM Tepmony, Directeur du 3ème cycle (GS)
28. Dr. LIN Mongkulserey, Directeur adjoint du centre de recherche et d'innovation et Chef du département de Mathématiques Appliquées et Statistiques
29. Dr. HAN Virak, Doyen de la faculté de génie civil (GCI)
30. Dr. CHHUON Kong, Doyen de la faculté d'hydrologie
31. Dr. CHRIN Phok, Doyen de la faculté de génie électrique et énergétique (GEE)
32. Dr. IN Sokneang, Doyenne de la faculté de génie chimique et alimentaire (GCA)
33. Dr. ENG Chandoeun, Doyen de la faculté de génie de géo-ressources et de géotechnique (GGG)
34. M. LAY Heng, Vice-doyen de la faculté de génie électrique et chef de département de génie informatique et communication (GIC)
35. M. SIEANG Phen, Chef de la coopération et des relations internationales (IRO)
36. Dr. SRENG Sochenda, Chef de département de Télécommunications et Réseaux (GTR)
37. Mme SREY Malis, Chef de département du tronc commun (TC)
38. Dr. CHAN Sarin, Chef de département de génie mécanique et industriel (GIM)
39. Dr. PHUN Veng Kheang, Chef de département transports et infrastructures (DTI)
40. Mlle YIN Molika, Chef du bureau de la cellule d'interface (UIL)
41. Mme KHEM TranKrasel, Coordinatrice de la section de français (SF)
42. M. SO Phea, Coordinateur de la section d'anglais (SA)
43. M. SOK Kimheng, Responsable de la bibliothèque STEM
44. Dr. SRANG Sarot, Responsable du génie mécanique et des systèmes de contrôle au Département de génie industriel et mécanique et coordinateur du programme international
45. Dr. YIN Molika, Responsable des relations avec les entreprises (UIL)
46. M. KHIEV Samnang, Responsable du service informatique (IT)
47. M. HASH Chanly, Head Department of Architectural Engineering

Accueil des participants et ouverture de la réunion

As an introduction, **H.E. Dr. Sackona PHOEURN**G, Minister of Culture and Fine Arts and Chairperson of ITC Board of Trustees, welcomed all members of the Board of Directors in person and online and thanked them for participating in this 34nd Board of Trustees. The Board of Trustees has turned 34 years old. That means it is one of the oldest in Cambodia. OKNHA LAY Mengsun testifies to this because he participated in the first meeting of the ITC Board of Trustees. Many thanks for your loyalty. Comme d'habitude, je tiens à exprimer mes remerciements à tous les membres du CA venant de différents organismes et universités qui restent toujours avec l'ITC, ce qui fait que l'ITC se développe davantage jusqu'à maintenant. De telles réussites auraient été impossibles sans l'appui de France, de Belgique, du Japon et de bien d'autres partenaires de l'ITC. Comme vous voyez parmi nous, l'ensemble des jeunes qui prennent le relai. L'avenir de l'ITC leur appartient. On fait confiance en vous, les jeunes. Malgré tout, pour assurer un développement durable de l'ITC, vos soutiens et coopérations demeurent cruciales pour ces jeunes.

Once again, I would like to thank all the participants in person and online. I would like to say that it is thanks to all of you that the ITC has become what it is today. Nous ne pouvons pas oublier la France, la Belgique, le Japon, l'AUF et bien d'autres partenaires et bailleurs de fonds comme la Banque Mondiale (WB) et la Banque Asiatique de Développement (ADB) etc. You can see today; our former students have become leaders of ITC. We are very proud of it. But it is thanks to all of you. I hope you continue to help us because we still need you. So, I thank you for being here today so that we can take stock of last year and draw up a new action plan for the year to come.

Pour commencer, on peut maintenant accorder notre temps de parole à M. Pierre VINCENT, conseiller de Coopération et d'Action Culturelle de l'Ambassade de France.

M. Pierre VINCENT, Conseiller de Coopération et d'Action Culturelle de l'Ambassade de France

Merci beaucoup Madame la ministre. Madame la Ministre de la Culture et des Beaux-Arts, Présidente du Conseil d'Administration de l'Institut de Technologie du Cambodge, Madame PHOEURNG Sackona, Monsieur le Secrétaire d'Etat au Ministère de l'Éducation, de la Jeunesse et des Sports, cher Romny, le Directeur de l'ITC, cher Kimtho. Bonjour à toutes et à tous.

C'est toujours un grand honneur pour moi de participer à tous les événements de l'ITC et particulièrement au Conseil d'administration. Vous l'avez évoqué, Madame la ministre, l'ITC est une université de référence au niveau national, régional mais aussi international. Cette année, l'ITC fête ses 60 ans qui l'âge de pleine maturité. C'est l'âge aussi de récolter les fruits de son travail. Je cite, par exemple, les journées scientifiques au mois de juin tout d'abord les journées scientifiques qui sont toujours un événement incontournable et de l'ITC et puis le deuxième, c'était le lancement du laboratoire d'excellence en agrosystème durable. Ce laboratoire marque les jalons d'une coopération scientifique entre l'IRD et l'ITC dans le domaine de la co-ingénierie. Vous le savez, madame la Ministre, mais permettez-moi de vous le rappeler encore aujourd'hui, la France a toujours été aux côtés de l'ITC pour l'avenir. Nous sommes peut-être le seul partenaire à être à la fois investi dans le champ de la formation mais également dans le champ de la recherche. Je ne citerai pas tous les instituts et les partenaires français qui sont installés dans les locaux de l'ITC. Je remercie encore, madame la ministre, ainsi que le monsieur le recteur pour votre bienveillance et toujours votre sympathie à l'égard de tous les partenaires et notamment des partenaires français. La France apporte son aide à travers différents programmes, je pense que le premier programme, c'est celui de la mobilité. Cette année, l'ambassade de France a octroyé des bourses niveau master et doctorat à des élèves de l'ITC. Vous savez que ce sont souvent d'excellents élèves qui vont étudier en France dans les domaines de l'ingénierie des sciences. Je leur souhaite donc le meilleur et je formule le vœu que l'ITC soit toujours un institut qui puisse fournir les élites dont ce pays a aussi besoin. C'est un des meilleurs exemples je voudrais aussi naturellement vous dire. L'ambassade est en soutien des activités de recherche à travers des financements des financements de l'ambassade que nous appelons des FEF. Cette année, ces financements se montent à 1,3 millions d'euros pour des projets qui se déroulent au sein de l'ITC. Nous continuerons donc à mobiliser des fonds pour favoriser la recherche et continuer aussi la formation qu'elle soit initiale ou continue de tous les étudiants cambodgiens mais aussi des jeunes professeurs ou des postes doctorants. Ça, je pense que c'est un axe important de notre relation de notre partenariat avec l'ITC et nous y sommes particulièrement attachés. Je voudrais aussi vous dire que nous devons aujourd'hui rendre hommage à un de nos anciens collègues qui a œuvré pendant longtemps ici et qui, grâce à son travail, a permis et bien de faire vivre et des partenariats et d'apporter aussi des résultats très prometteurs et très encourageants. Je pense à notre collègue Bruno DAGUES qui est parti récemment. Je souhaite saluer sa mémoire et je sais à quel point il était attaché à ce pays et plus encore à cet institut de référence lorsqu'il nous a dit au revoir je pense que c'est probablement la chose qui allait lui prendre une des choses qui allait le plus lui manquer. Donc, une petite pensée à sa mémoire et à tout le travail qu'il a apporté à l'ITC et à ses étudiants et à son corps enseignant. Je ne serai pas plus long madame la ministre, je vous en remercie. Merci à toutes et à tous de m'inviter de me laisser la parole en début de ce Conseil d'administration et encore une fois j'ai hâte de voir quels sont les travaux qui ont été réalisés cette année qui témoignent encore du grand dynamisme et de la place majeure de l'ITC dans le paysage universitaire cambodgien mais aussi régional et international. Tous mes vœux pour cette séance. Merci encore madame la ministre.

S. E. Dr. Sackona PHOEURNG, Ministre de la Culture et des Beaux-Arts et Présidente du Conseil d'Administration de l'ITC

Merci monsieur le Conseiller de Coopération et d'Action Culturelle de l'Ambassade de France. Comme vous le savez, la Belgique est aussi notre partenaire de longue date. Elle est représentée par le Prof. Frédéric DESBASTE. La parole est à vous monsieur.

Prof. Frédéric DESBASTE, représentant de l'ARES de Belgique

Merci madame la Ministre de me donner l'opportunité de participer à distance. La dimension de l'international de l'ITC est vraiment important et nous sommes très fiers d'en faire partie. Dans le cadre de l'ARES-CCD, nous avons le programme institutionnel qui est en cours et nous l'avons vu citer dans les documents de cette réunion. Nous sommes là pour soutenir l'enseignement et la recherche de l'ITC.

Nous avons deux projets de recherche qui sont en cours de validation avec l'ITC et nous espérons qu'ils vont démarrer l'an prochain. Merci madame la Ministre.

S. E. Dr. Sackona PHOEURNG, Ministre de la Culture et des Beaux-Arts et Présidente du Conseil d'Administration de l'ITC

Merci monsieur le représentant de l'ARES de Belgique. Il fait encore nuit chez vous, je vous remercie encore une fois de votre participation.

Nous avons un autre partenaire très important aussi, c'est l'AUF. Elle est avec nous plus de 30 ans. Elle est représentée par son directeur régional Asie-Pacifique, monsieur Nicolas MAINETTI. La parole est à vous monsieur.

Prof. Nicolas MAINETTI, Directeur régional de l'AUF – Asie- Pacifique

Merci

madame la Ministre et la présidente du Conseil d'administration à Monsieur le directeur de l'Institut de technologie du Cambodge. C'est un réel plaisir pour moi également de d'avoir l'opportunité de participer à ce conseil en visioconférence. Comme vous l'avez dit, je viens d'arriver à la direction Asie-Pacifique de l'Agence universitaire de la Francophonie et donc je prends un peu connaissance des dossiers puisque j'ai été nommé il y a 3 semaines. Je suis encore en Europe et donc je découvre avec un extrême plaisir la qualité de l'enseignement, la qualité des projets, la qualité de la recherche, ils sont dispensés à l'Institut technologie du Cambodge et je veux simplement vous confirmer ou vous dire que l'agence universelle de la Francophonie est très très honorée de vous compter parmi ces membres et vous remercie également puisque vous abritez le bureau national Cambodge de l'Agence universitaire de la Francophonie et donc vous êtes le pilier de nos actions pour le Cambodge. J'espère pouvoir venir vous rencontrer très prochainement. Je vais vous rencontrer bientôt. Ma mobilité est prévue pour le mois de juillet et donc dès que je suis sur place, c'est bien évident que je souhaite vous rencontrer et en tout cas je vous félicite pour le magnifique rapport d'activités et toutes les belles perspectives de collaboration qui en résultent. Je vous remercie de votre de votre attention.

S. E. Dr. Sackona PHOEURNG, Ministre de la Culture et des Beaux-Arts et Présidente du Conseil d'Administration de l'ITC

Merci monsieur le directeur. Now, I return to the Japanese colleagues who have been with us since the year 2000 from Jica and AUN/SEED-Net. Thanks to them, we have relations with English-speaking universities in ASEAN and Japan. We have with us special guests Prof. KOICHIRO Watanabe and Prof. Jun-ichi TAKADA. So, please the floor is yours, now.

Prof. KOICHIRO Watanabe, Representative of Jica in Tokyo

Thank you, Madam Sackona. I am KOICHIRO Watanabe, Senior Advisor of JICA in Tokyo, professor emeritus, and member of AUN/SEED-Net. I was at ITC early last month for Scientific Day, and I felt like ITC was showing some great things in terms of research in Cambodia. Thank you.

S. E. Dr. Sackona PHOEURNG, Ministre de la Culture et des Beaux-Arts et Présidente du Conseil d'Administration de l'ITC

Thank you, professor. Thank you, Professor. Ah, you were in Cambodia recently and I would also like to ask Professor Takada to take the floor.

Prof. Jun-ichi TAKADA, Chief Advisor of LBE Project

Thank you very much Madam Sackona. It is my pleasure to join the meeting. I apologize for not participating in person but I am happy to see the progress of the ITC every year. I hope to start a project level soon and see you all again in the near future.

S. E. Dr. Sackona PHOEURNG, Ministre de la Culture et des Beaux-Arts et Présidente du Conseil d'Administration de l'ITC

Thank you, professor. Thank you, Professor. You know the Japanese help not only ITC but other areas in Cambodia as well. For example, for the Angkor heritage, we have colleges from Japan working with us. We can now start our meeting. You have the documents in your hands and we will read the agenda first.

J'aimerais donc qu'on lise l'ordre de jour que nous avons proposé dans le document. Le rôle du CA est de prendre les propositions du Consortium qui s'est réuni en mars dernier et de les approuver si tout va bien. Pour commencer, je demande à monsieur SOY Ty, directeur adjoint, de présenter les activités réalisées et les avis du Consortium.

M. SOY Ty, Directeur adjoint de l'ITC

M. SOY Ty présente le suivi des décisions du CA 2023 et les avis du Consortium 2024.

No	Relevé de Décision du CA 2023	2023-2024
1	Reclasser les projets par nature, par niveau (ne pas les mettre tous ensemble)	Réalisé
2	La durée de « Bachelor of ITC » dure 5 ans	Réalisé
3	L'ITC va discuter avec le MEJS et donner le titre « Professeur Émérite » aux dirigeants et les professeurs de l'ITC qui sont à la retraite	En réalisation
4	Ingénieurs : ITC-Phnom Penh = 1300 étudiants (80 bourses); ITC-Tbong Khmum = 120 Techniciens : 1000 étudiants (15% bourses)	Réalisé
5	Droits de scolarité : Ingénieurs : (800USD/650USD pour les filles); Techniciens (350USD/250USD pour les filles)	Réalisé
6	- Implimentation des projets: * Institution <ul style="list-style-type: none"> Establishment of Risk Management Platform for Air Pollution in Cambodia –SATREPS –JICA (2022 – 2027); Institutional Support (IS) – ARES (2022 – 2027) ; Science and Technology Project in Upper Secondary Education (STEP UP) – ADB (2023 – 2029); Research and Training Platform on Power System – EU/AFD (2023 – 2027); Energy Transition Sector Development Program (ETSDP) – ADB (2023); Skills for Future Economy (SFE) – ADB (2023 – 2029); LBE-Phase 2 – JICA (2024 – 2029). * Research Project (total: 80 projects) <ul style="list-style-type: none"> Continuous projects: 59 ; Newly approved research projects: 21. 	Réalisé

Les AVIS du Consortium 2024

No	Avis du Consortium 2024	Favorable
1	Valorisation de la transversalité des cours entre les départements	X
2	Création de: Master of Architectural Engineering (GS)	X
3	Création de : Artificial Intelligence Engineering and Cybersecurity (GIC-International Program)	X
4	Création de: IT Network and Programming (GIC-Associate)	X
5	Création de : Industrial Engineering (GIM-Associate)	X
6	Création de : Geotechnical Engineering (GGG-Associate)	
7	Changement du nom: Materials Science and Structure” to “Materials and Built Environment” (RIC)	À revoir
8	New PathWay of ECAM LaSalle “Second years of International Program can go directly to 3rd year at ECAM LaSalle” (ITC-ECAM-Kasetsart University)	À revoir

S. E. Dr. Sackona PHOEURNNG, Ministre de la Culture et des Beaux-Arts et Présidente du Conseil d'Administration de l'ITC

Merci beaucoup. Je crois que les détails sont dans les rapports que vous avez dans vos mains.

Pour le relevé de décision du CA 2023, je vois que les deux premiers points sont très bien. Quant au point 2, il sera discuté avec le MEJS, vous l'avez dit. Ce titre sera attribué aux dirigeants de l'ITC qui sont à la retraite. Où vous en êtes maintenant? Il nous faudra encore combien de temps? Seuls les dirigeants ou tous les professeurs de l'ITC peuvent en bénéficier? Si c'était le cas, ce ne serait pas facile. Selon moi, il faudrait avoir des critères de sélection en se basant sur les qualifications de chaque professeur qui mérite ce grade. Il vaut mieux le préciser. Il faut créer une commission pour prendre une décision. Les frais de scolarité passent de 650\$ à 800\$, je ne crois pas que ce soit un problème, si nous les comparons avec ceux des universités privées.

En ce qui touche les avis du Consortium 2024, ils concernent plusieurs activités : rendre certains cours transversaux, c'est très important. Je crois que l'ITC va déterminer de manière claire. À propos de la création de nouveaux cours, nos membres du Consortium ont attiré notre attention sur ce sujet-là. C'est important que l'ITC puisse garder la qualité de la formation du fait que quand on met en place un nouveau cours, on a besoin des ressources humaines. Je ne dis pas NON mais il faut faire attention pour maintenir le développement durable de l'ITC. Pour le changement du nom: Materials Science and Structure" to "Materials and Built Environment" (RIC), il y a beaucoup de recommandations des membres du Consortium. Et le dernier : New PathWay of ECAM LaSalle "Second years of International Program can go directly to 3rd year at ECAM LaSalle" (ITC-ECAM-Kasetsart University). À ce propos, vous avez beaucoup travaillé et les membres du Consortium sont d'accord. Ils peuvent passer directement en 3^{ème} année dans le cadre de ce programme.

C'est crucial que la décision soit prise pour ne pas tarder la mise en application ce programme qui sera opérationnel à partir de l'année académique prochaine. (...vous avez des commentaires ou remarques?) Ok, il n'y en a pas. On passe maintenant aux événements marquants présentés par S. E. Prof. Dr. PO Kimtho.

S. E. Prof. Dr. PO Kimtho, Directeur de l'ITC

Merci beaucoup Madame la Présidente. Tout d'abord, je souhaite la bienvenue à tous les participants et je tiens vous remercier grandement pour votre soutien incontournable. [...] pour en savoir plus, veuillez consulter le document.

S. E. Dr. Sackona PHOEURNNG, Ministre de la Culture et des Beaux-Arts et Présidente du Conseil d'Administration de l'ITC

Thank you very much. You see several events have been carried out by ITC colleagues.

Subsequently, I again ask Mr. SOY Ty, to present the summary of study activities for this academic year 2023-2024.

M. SOY Ty, Directeur adjoint de l'ITC

Merci Madame la Présidente. [...] pour en savoir plus, veuillez consulter le document.

S. E. Dr. Sackona PHOEURNNG, Ministre de la Culture et des Beaux-Arts et Présidente du Conseil d'Administration de l'ITC

Merci monsieur SOY. J'ai une petite question concernant les différentes bourses de l'ITC : 3322, cela représente combien de pourcentages?

M. SOY Ty, Directeur adjoint de l'ITC

Environ 40%.

S. E. Dr. Sackona PHOEURNNG, Ministre de la Culture et des Beaux-Arts et Présidente du Conseil d'Administration de l'ITC

Oui, pour mieux comprendre, veuillez indiquer cela en pourcentage.

Nous passons maintenant à la présentation du 3^{ème} cycle.

Dr. SIM Tepmony, Director of Graduate School

Merci Madame la Présidente. [...] pour en savoir plus, veuillez consulter le document.

S. E. Dr. Sackona PHOEURNG, Ministre de la Culture et des Beaux-Arts et Présidente du Conseil d'Administration de l'ITC

Thank you. I have one thing to tell you. For the next time, we would really appreciate it if you could make a graphic for all academic programs: technician, engineer, master's, and PhD. It is easy for us to understand.

Ok, now, I will give the floor to the E-Learning Center.

Mr. LAY Heng, Head of the Information and Communication Department

Thank you his Excellency. [...] pour en savoir plus, veuillez consulter le document.

S. E. Dr. Sackona PHOEURNG, Ministre de la Culture et des Beaux-Arts et Présidente du Conseil d'Administration de l'ITC

Thank you. One more presentation before the break, now it's the library's turn.

Mr. SOK Kimheng, Head of the library

Thank you his Excellency. [...] pour en savoir plus, veuillez consulter le document.

S. E. Dr. Sackona PHOEURNG, Ministre de la Culture et des Beaux-Arts et Présidente du Conseil d'Administration de l'ITC

Thank you. The next presentation is the Research and Innovation Center.

Dr. OR Chanmoly, Director of the Research and Innovation Center

Merci Madame la Présidente. [...] pour en savoir plus, veuillez consulter le document.

S. E. Dr. Sackona PHOEURNG, Ministre de la Culture et des Beaux-Arts et Présidente du Conseil d'Administration de l'ITC

Thank you. This is the end of the presentations of the activities carried out over the past year. Now, we move on to the activities for next year in the report and Dr. BUN Kim Ngun presents this part.

Dr. BUN Kim Ngun, directeur adjoint de l'ITC

Thank you, Madame la Présidente. [...] pour en savoir plus, veuillez consulter le document.

S. E. Dr. Sackona PHOEURNG, Ministre de la Culture et des Beaux-Arts et Présidente du Conseil d'Administration de l'ITC

Thank you. This general and educational document includes tuition fees, the number of DUT and engineer students. I think it's almost the same compared to last year. But don't forget to send the new Pathway of ECAM Lasalle and the name change to our Consortium members. Now, we will talk about the "finance" part, presented by Dr. NGUON Kollika.

Dr. NGUON Kollika, directeur adjoint de l'ITC

Thank you, Madame la Présidente. [...] pour en savoir plus, veuillez consulter le document.

Pour mieux mémoriser, le tableau ci-dessous illustre toutes les décisions du Conseil d'Administration (CA) de 2024.

Relevé de décisions du CA 2024

No	Relevé de Décision du CA 2023	Avis
1	Valorisation de la transversalité des cours entre les départements	Favorable
2	Création de: Master of Architectural Engineering (GS)	Favorable
3	Création de : Artificial Intelligence Engineering and Cybersecurity (GIC-International Program)	Favorable
4	Création de: IT Network and Programming (GIC-Associate)	Favorable
5	Création de : Industrial Engineering (GIM-Associate)	Favorable
6	Création de : Geotechnical Engineering (GGG-Associate)	Favorable
7	Changement du nom: Materials Science and Structure” to “Materials and Built Environment” (RIC)	Favorable
8	New PathWay of ECAM LaSalle “Second years of International Program can go directly to 3rd year at ECAM LaSalle” (ITC-ECAM-Kasetsart University)	Favorable

Liste de la nomination de l'équipe de direction de l'ITC pour 2024-2025

No		Nom et prénom	Fonction
1	Prof.	Dr. PO Kimtho	Directeur de l'ITC
2	Dr.	Dr. OM Romny	Directeur honoraire de l'ITC
3	M.	Ludovic PROTIN	Directeur honaire de l'ITC
4	M.	SOY Ty	Directeur adjoint, chargé de la pédagogie et des études et d'Assurance de qualité interne
5	Dr.	BUN Kim Gnun	Directeur adjoint chargé de la plainification et projet-assisté par M. BUN Saret
6	Dr.	NGUON Kollika	Directeur adjoint cahrgé de l'administration et des finances
7	Dr.	BUN Long	Directeur adjoint cahrgé de la coopération, de la recherche et de l'innovation, et de la cellule d'interface (UIL); assisté par Mme HOUNG Peany, chef du centre d'incubateur et Dr. SEANG Chansopheak, chef du bureau des services d'inginerie et technologie
8	Dr.	CHUNHIENG Thavarith	Conseiller de la direction chargé de la coopération
9	M.	NUTH Sothân	Conseiller de la direction chargé de la pédagogie, des études, des sports et de la jeunesse
10	M.	PENH San	Conseiller de la direction chargé de l'adminsitracion, des finances et du service interne
11	Dr.	SIM Tepmony	Directeur du programme du 3 ^{ème} cycle, assisté par Dr. HIN Raveth et Dr. EK Pichkmony
12	Dr.	OR Chanmoly	Directeur du Centre de Recherche et d'Innovation Assisté par : - Dr. YOS Phanny et Dr. TAN Reasmey, directeurs adjoints; - M. KRET Kakada, chef de l'unité de recherche « Technologie et Gestion de l'énergie »; - Dr. PHAT CHanvorleak, chef de l'unité de recherche « Technologie des Aliments et Nutrition »; - Dr. VALY Dona, chef de l'unité de recherche « Technologie de l'Information et responsable du programme ECAM LaSalle Cambodia; - Dr. DOUNG Piseth, chef de l'unité de recherche « Sceince et Structure des Matériaux »;

			- Dr. PENG Chanthol, chef de l'unité recherche « Eau et Environnement ».
13	Dr.	IN Sokneang	Doyenne de la faculté de génie chimique et alimentaire Assistée par Dr. HOR Sivmey
14	Dr.	HAN Virak	Doyen de la faculté de génie civil Assisté par Dr. LY Hav et M. HASH Chanly, chargé de l'Architecture
15	M.	LAY Heng	Chef du département GIC, du Centre E-Learning, assisté par Mlle Seak Leng
16	Dr.	CHHUON Kong	Doyen de la faculté d'hydrologie, assisté par Dr. ANN Vannak
17	Dr.	ENG Chandoeurn	Chef du département GGG, assisté par Mlle PECH Sopheap
18	Dr.	CHRIN Phok	Chef du département GEE, assisté par Dr. AM Sokchea et Dr. CHOU Kosal
19	Dr.	CHAN Sarin	Chef du département GIM, assisté par M. UN Amata et Dr. CHHIT Saosometh
20	Dr.	SRENG Sokchenda	Chef du département Télécommunications et Réseaux, assisté par Dr. THOUN Kosal
21	Dr.	PHUN Veng Kheang	Chef du département Transports et Infrastructure, assisté par Mlle YANG Panha
22	Mr.	HASH Chanly	Chef du département GAR
23	Dr.	LIN Mongkulserey	Responsable du campus ITC à Tbong Khmum Chef du département des Mathématiques Appliquées et Statistiques, assisté par Dr. PHAUK Sokhey
24	Mme	SREY Malis	Chef du département de Tronc Commun, assisté par - Dr. LIN Mongkulserey, responsable du programme de mathématiques; - M. LONG Sovann, responsable du programme de physique; - Mme KHEM TRan Krasel, coordinatrice de la section de français - M. SO Phea, coordinateur de la section d'anglais
25	Dr.	SRANG Sarot	Responsable du laboratoire DCLab et du programme international ECAM Cambodge
26	M.	SIEANG Phen	Chef du bureau des Relations Internationales
27	Dr.	YIN Molika	Responsable de la cellule d'Interface (UIL)
28	M.	AN BUN Eng	Chef du Bureau des Études
29	Dr.	HANF Leakhena	Chef du bureau d'Assurance de Qualité
30	Mme	HANG Vinchothy	Chef du bureau des personnels
31	M.	MOEUNG Noi	Chef du bureau de PB
32	Mme	KOY Sophary	Chef du bureau de Comptabilité et des Finances
33	M.	NHEM Sophal	Chef du bureau d'achats
34	M.	KHIEV Samnang	Chef du service informatique, assisté par M. SIENG Chamroeurn
35	M.	SOK Kimheng	Chef de la Bibliothèque
36	M.	KEO CHHOM Sethy	Chef du bureau du service technique

Annex 3. Overview of CA 2024 Decision and Recommendation of Consortium 2025.

No	Relevé de Décision du CA 2024	2024-25
1	Valorisation de la transversalité des cours entre les départements	Réalisé
2	Création de: Master of Architectural Engineering (GS)	Réalisé
3	Création de : Artificial Intelligence Engineering and Cybersecurity (GIC-International Program)	Réalisé
4	Création de: IT Network and Programming (GIC-Associate)	Réalisé
5	Création de : Industrial Engineering (GIM-Associate)	Réalisé
6	Création de : Geotechnical Engineering (GGG-Associate)	Réalisé
7	Changement du nom: Materials Science and Structure” to “Materials and Built Environment” (RIC)	Le même nom “MSS”
8	New PathWay of ECAM LaSalle “Second years of International Program can go directly to 3rd year at ECAM LaSalle” (ITC-ECAM-Kasetsart University)	Réalisé

No	Avis du Consortium 2025	Département	AVIS
1	New course for 3 rd Year semester 1 (C:16 ; TD:0 ;TP:0) Mastering skills by using IA Tool	GEE	Favorable
2	Combine Analog Filter with Analog Electronics for 3 rd Year semester 1 (C:32 ; TD:16 ;TP:16) Fundamental of Electronics	GEE	Favorable
3	Energy Conversion Move to 4 th Year Semester II (C:32 ; TD:16 ; TP:32)	GEE	Favorable
4	Power System Analysis and Optimization Move to 4 th Year Semester I (C:32 ; TD:16 ; TP:32)	GEE	Favorable
5	Data Science : Modify 7 courses in total, in which 4 courses modified names, 1 course is moved to semester 2, 1 course is modified the duration, and 1 course is a new course.	AMS	Favorable
6	Financial Engineering : All courses in year 3 are the same name in Data Science program. Some courses in year 4 and year 5 are the same name in Data Science program.	AMS	Favorable
7	Traffic Management and Modeling will be replaced by Traffic Engineering, Management and Simulation (I3-S2)	GTI	Favorable
8	Transport Systems of Freights and Traveler will be replaced by Transport Modeling and Planning (I3-S2)	GTI	Favorable

Annex 3a. Report of French Language Teaching (2024-2025).

Rapport de l'enseignement de français Mars 2025

La Section de Français de l'Institut de Technologie du Cambodge assure des cours de français langue étrangère à tous les étudiants de la première année à la quatrième année du cursus ingénieur. Pour les groupes de 5^{ème} année (32h pour un semestre seulement) : cours de *Module d'Insertion Professionnelle (MIP)* (en français)

Classe	Niveau	Nombre d'heures/semaine		Nombre d'heures/an
		Semestre 1 (16 semaines)	Semestre 2 (16 semaines)	
I1	A1	6h	6h	192h
I2	A2	6h	4h	160h
I3	A1*	4h	2h	96h
	A2			
	B1			
I4	A2	2h	2h	64h
	B1			
	B2			
I5	MIP	2h		32h

*I3-A1 : Étudiants ingénieurs venant du cycle technicien

1. Ressources humaines

No .	Nom et prénom	Sexe	Département	Date de naissance	Diplôme	Université et pays	Année de fin d'étude	Sujet de thèse	Université et pays	Année de fin d'étude
1	KHEMTRAN Krasel	F	SF	13.10.1971	Master 2			La motivation des étudiants dans l'apprentissage du français à l'Institut de Technologie du Cambodge	Université de Moncton, Canada	1999
2	MONG Sokunvatey	F	SF	22.04.1965	Licence ès Lettres	Université de Phnom Penh (Cambodge)	1994			
3	EL Sotheany	F	SF	01.05.1970	Licence FLE	Université de Phnom Penh (Cambodge) , Université de Rouen (France)	1993 / 2001			
4	KHEM Nimith	F	SF	25 mai 1965	Master 2	Institut d'Etat pédagogique des langues étrangères de Kiev (R	1990		Institut de Kiev, Ukrai	1990
5	NHEP Kim Hun	M	SF	18.11.1972	Licence ès Lettres	Université Royale de Phnom Penh (Cambodge)	1996			
6	PRUM Rithy	M	SF	05.11.1971	Licence	Université de Phnom Penh (Cambodge) , Université de Roue	1994			
7	PHUONG Sothea	F	SF	07.07.1987	Master 2	Institut National de l'Education, Cambodge	2021			
8	CHAN Sokunteary	F	SF	02.04.1990	Licence ès Lettres	Université Royale de Phnom Penh.	2012			
9	MAM Champei	F	SF	27.12.1979	Master 2	Université Caen Basse Normandie, France	2013			

10	KUCH Chanpoly	M	SF	01.01.1973	Master en linguistique	Université Royale de Phnom Penh	2009			
11	YEANG Ranich	F	SF	22.05.1998	Licence	Université Royale de Phnom Penh	2018			
12	SAR Hieng	F	SF	26.02.1948	Licence + DALF C1	Université Royale de Phnom Penh, Cambodge	1992 et 2006			
13	PAN Chansonita	F	SF	07.08.1995	Licence	Université Royale de Phnom Penh, Cambodge	2017			
14	BUN Veary	F	SF	19.05.1954	Licence	Université Royale de Phnom Penh, Cambodge	1988			
15	MUONG Romany	F	SF	27.05.1959	DALF C1	Institut Français du Cambodge, Cambodge	2006			
16	KEM Malyan	F	SF	08.11.1950	DALF C1 et Diplôme	Institut de Français du Cambodge et Université de Rouen : Fr	2000 et 2002			
17	VORN Savathana	M	SF	19.05.1984	Master	CUS, Cambodge (Cambodian University for Specialties)	2018			
18	NET Ninit	M	SF	10.09.1993	Licence	Université Royale de Phnom Penh (Cambodge)	2018			

19	PHAN Phadeth	M	SF	01.01.1995	Master 2	Institut National de l'Education, Cambodge	2022			
20	PHUONG Chenda	M	SF	14.01.1984	Licence+1 / DELF B2	Université Royale de Phnom Penh, Cambodge et Institut Nat	2017 et 2023-25			
21	AN SINA	M	SF	16.01.1997	Licence	Université Royale de Phnom Penh (Cambodge)	2019			
22	SOK DALIN	M	SF	4/16/1987	Licence+1	Institut National de l'Éducation, Cambodge	2016			
23	HENG VALONG	M	SF	27.08.1995	Master	l'Institut National de l'Éducation au Cambodge	2024			
24	SAN VITOU	M	SF	30.11.1989	Licence	Université Royale de Phnom Penh, Cambodge	2011			
25	TOL SINATH	M	SF	07.07.1996	Licence	Université des Moussons (Cambodge)	2019			
26	VEY SORIYA	F	SF	24.09.2001	Licence	Université Royale de Phnom Penh	2022			

27	SET Sovankesa	F	SF	01.01.2001	Licence	Université Royale de Phnom Penh	2023			
28	NOUM VIRADAY	M	SF	28-08-1989	Master 2	Institut National de l'Éducation, Cambodge	2023			
29	IM PUTHEARITH	M	SF	12.09.1990	Master 2	Institut National de l'Éducation, Cambodge				
30	LIM HORCHUONG	F	SF	20.06.2000	Licence	Université Royale de Phnom Penh, (Cambodge)	2021			
31	LY META	M	SF	05.11.2003	DELF B2	IFC (Institut de Français du Cambodge)	2022			
32	YORN SAMNANG	M	SF	26.04.1991	Master 2	Institut National de l'Éducation, Cambodge	2021			

2. Méthode d'évaluation

- Au premier semestre :
 - Contrôle (mi-semestre) : 4 types d'évaluation : Vocabulaire, grammaire, compréhension écrite (CE), production écrite (PE)
 - Examen final (fin du semestre) : 5 types d'évaluation : Vocabulaire, grammaire, compréhension orale (CO), compréhension écrite (CE) et production écrite (PE),
- Au deuxième semestre :
 - Contrôle (mi-semestre) : 4 types d'évaluation : Vocabulaire, grammaire, compréhension écrite (CE), production écrite (PE)
 - Examen de niveau (fin du semestre) : A1/A2/B1/B2 sous 4 compétences d'évaluation : compréhension orale (CO), compréhension écrite (CE), production écrite (PE) et production orale (PO), bien adaptées au Cadre Européen Commun de Référence pour les Langues (CECRL).

3. Résultats de l'examen de niveau (Année 2023-2024) Campus Phnom Penh (2023-2024)

Cycle	Niveau	Résultat			
		Succès	Échec	Absent	Total
1 ^{ère} année (I1)	A1	871	176	328	1375
2 ^{ème} année (I2)	A2	879	306	171	1356
3 ^{ème} année (I3)	A1 *	19	06	02	27
	A2	94	58	41	193
	B1	469	207	0	676
4 ^{ème} année (I4)	A2	43	25	47	145
	B1	15	61	0	76
	B2	34	80	0	114

Troisième année : I3

Répartition en **3 groupes de niveau** selon les résultats de l'année précédente :

* Groupe de niveau A1 (I3-A1)

Il s'agit des étudiants venant du cycle Technicien. La plupart d'eux n'ont jamais appris le français.

4. Certification du niveau de français

L'ITC délivre deux types de certification :

Année d'études	Niveau de français	Nombre total *	Obtention A1		Obtention A2		Obtention B1		Obtention B2	
			Nombre	%	Nombre	%	Nombre	%	Nombre	%
I1	A1	1375	871	63%						
I2	A2	1356			879	64%				
I3	A1	27	19	70%						
	A2	193			94	48%				
	B1	676					469	69%		
I4	A2	145			43	29%				
	B1	76					15	19%		
	B2	114							34	29%

- 1) **Attestation de connaissance en langue française** : il s'agit d'une simple attestation donnant le nombre d'heures de cours de français effectués pour les étudiants qui ne bénéficient pas de la réforme à partir de 2016. Mais les étudiants des autres années peuvent également la demander en cas de nécessité.
- 2) **Attestation de niveau de langue française** : une session d'examen de niveau de français a lieu en juin, vers la fin du second semestre pour les étudiants en :
 - 1^{ère} année : A1
 - 2^{ème} année : A2
 - 3^{ème} année : A1/A2/B1
 - 4^{ème} année : A2/B1/B2

Plan d'action

- L'enseignement de la langue française sera maintenu uniquement en I1, I2, I3 et I4.
- Selon la décision du CA de 2016, tous les étudiants doivent avoir au minimum le niveau A2 en langues à la fin de leur cursus d'ingénieur.
- L'examen de niveau du français sera organisé en fin du semestre 2 pour chaque cycle.
- Pour une amélioration de l'enseignement de langues, il faut :
 - Adopter des critères des niveaux des enseignants pour l'enseignement des niveaux A1, A2, etc.
 - Exiger des justificatifs de niveau de langues des enseignants.
 - Faire appel à des francophones natifs (pour autant que les critères des recrutements soient respectés).
 - Accompagner pendant l'année académique les I3 et I4 actuels n'ayant pas atteint le niveau A2.
 - Soutenir les étudiants issus de la filière DUT pour leur permettre de rattraper le niveau.

Annex 3b. Report of English Language Teaching (2024-2025).

1. Introduction

ITC is one among the tertiary institutions in Cambodia, which trains students to become high quality engineers in different fields of technology for the need to develop the country. The English Language has been established and taught to students, from year2 to year5, since 1995. The rationales of the English language teaching at the Institute of Technology of Cambodia (ITC) are that having English proficiency would help students (1) in their study's life (2) increase chances to get jobs and (3) to pursue further studies in the country as well as abroad.

2. Human Resources of English Section

2 Professeurs Titulaires: 2 Masters

- Mr. SO Phea (Master, The University Waikato, New Zealand, 1998)
- Mr. CHENG Kimsan (Master, The University of Sydney, Australia, 1999)

20 Professeurs Vacataires : 1 Phd ; 12 Masters ; and 7 Bachelors

- 18 Professeurs Vacataires : 1 Phd ; 11 Masters ; and 6 Bachelors
- Mrs. CHEA Sophea (Bachelor, IFL, 2007)
- Mr. YEAT Vanna (Master, IFL, 2018)
- Ms. HEANG Leakena (Bachelor, IFL, 2017)
- Ms. TIM Nina Eliza (Bachelor, IFL, 2017)
- Mr. SIEN Bross (Master, IFL, 2019)
- Ms. LY Soda (Master, IFL, 2022)
- Ms. MEAS Phallin (Bachelor, IFL, 2017)
- Mr. SENG Mean (Master, Meiji Uni Japan, 2022)
- Ms. KIM Seyla (Master, BELTEI, 2022)
- Mr. HORM Kosal (Master, IFL, 2018)
- Mr. SOU Sovannara (Master, RUPP, 2018)
- Mr. UON Kakada (Master, RUPP, 2019)
- Mr. SON Rasi (Master, BELTEI, 2022)
- Mr. PENCHHOM Chareth (Phd, RUPP, 2022)
- Mr. AY Sok (Master, IFL, 2015)
- Ms. CHHE Sreyvatnak (Master, Australia, 2022)
- Mr. KEO Pichmony (Bachelor, IFL, 2017)
- Ms. NGET Meyny (Bachelor, NUM, 2021)

3. English Teacher

Strong points

- Create teacher recruitment announcement
- Advertise the teachers' recruitment in public
- Develop interview questions
- Develop marking criteria
- Make the shortlist candidates
- Conduct the interview
- Two sessions of teacher-training were conducted pre-semester1

Weak points

- Not many applicants to apply their CVs
- Most applicants have experience in teaching General English, not English for Engineering or Technology

4. English Course

Strong points

- Conduct diagnostic test
- Conduct level exam
- Classify group (class) in the right level
- Students get certificate

Weak points

- Not all students pass the level exam
- Fail students do not attend class
- Learning hours are limited (not enough, only 2 hours a week)

5. Course Material

Strong points

The English program is specially designed for engineering students who have studied some English previously. The English Section is developing its extracurricular program including a course book for year five students and production of its syllabus and course outline for each class. The core curriculum has been established based on the new series of Technology textbooks.

- "Technology1" Course Book by Eric H. Glendinning 2008, for year2 level A2.
- "Technology2" Course Book by Eric H. Glendinning & Alison Pohl 2008, for year3 level B1.
- "English for Environmental Science" by Terry Phillips 2009, for year4 level B2 Semester 1.
- "Essay and Academic Writing" Compiled by Teachers of English Section 2015, for year4 level B2 Semester 2.
- "English for Career and Work" Compiled by Teachers of English Section Third Updated 2020, for year5 Semester 1.

The course books mentioned above focus on English of general engineering contexts, science, technology which motivated students to learn.

Weak points

- The course books are designed for native English speakers
- Past Experience showed that each Course Book was not completed properly each semester

7. Aims and the objectives of the course are to:

- Acquire good reading strategy (for Literature Review)

- Develop communicative competence in the field of Engineering
- Develop the ability to express themselves confidently (presentation skills; interviewing skills)
- Learn how to organize technical terms for further use or studies

By the end of the course both strains year5 and 3 engineering and technician students will be able to:

- Present their report effectively to their lecturers (to defend the graduate projects)
- Communicate effectively with experts in the field of engineering in their work place.
- Use technical terms (terminology) appropriately in order to write reports on their workplace, practicum.
- Learn how to organize technical terms for further study or research.

8. Class Attendance

Strong points

- Strong and medium students attend class well
- Year 5 students have to attend English Classes Only in Semester 1

Weak points

- Many students fail to register for English Class
- Holidays and students field trips often interrupt their sessions

9. Teacher-Training

Strong points

- Training session is conducted occasionally in weekly staff meeting
- ITC sponsored two teachers to attend annual CamTESOL Conference in February 2024, Opportunity for Teacher Training/Capacity Building/Keeping up with new trend of teaching & learning.
- One teacher of SA will be attending ELT Forum in Laos, supported by US Embassy to Cambodia.

Weak points

- Training sessions run without foreign experts or advisors
- Short Courses of Teacher-Training both in and outside the country is out question in recent years

10. REPORT ON I2 STUDENTS

I2 (A2)

Number Students	Number Classes	
1026(372 girls)	23	
		TOTAL 1026

11. REPORT ON I3 STUDENTS

I3 (A2)

Number Students	Number Classes	
207(57 girls)	5	
		TOTAL 207

I3 (B1)

Number Students	Number Classes	
959(356 girls)	17	
		TOTAL 959

I3 (B2)

Number Students	Number Classes	
N/A	N/A	
		TOTAL N/A

12. REPORT ON I4 STUDENTS

I4 (A2)

Number Students	Number Classes	
N/A	N/A	
		TOTAL N/A

I4 (B1)

Number Students	Number Classes	
253(96 girls)	5	
		TOTAL 253

I4 (B2)

Number Students	Number Classes	
755(299 girls)	14	
		TOTAL 755

13. REPORT ON I5 STUDENTS – “English For Career and Work”

I5

Number Students	Number Classes	
1198(404 girls)	26	
		TOTAL 1198

14. REPORT ON STUDENTS’ OVER ALL, by February 14, 2025

Level	Number of students in each level
A2	1233
B1	1212
B2	755
I5	1198
Total	4398

15. Summary on Results of Students' Level - 2023-24

Classes	Level	Total	Passed	Failed
I2	A2	1355	1001	354
	B1	0	0	0
	B2	0	0	0
I3	A2	82	22	60
	B1	1111	848	263
	B2	0	0	0
I4	A2	27	0	27
	B1	273	96	177
	B2	475	150	325

16. Conclusion and Remarks

To summarize, Learning English here at ITC is an elective subject (year 2 – 4) and year 5 is compulsory. However, it is a vital learning process that benefits them. It facilitates their studies. It is a general communication tip for those who pursue their career as engineers, not to mention a certain number of graduates who wish to continue further study in the country and overseas.

ITC has traditionally been encouraging female students to register studying courses of engineering. In this particular academic year of 2023-24, among 4398 students (year 2 – year 5), 52 percent are girls who study in different fields of engineering – most is in GCA department (68%), and least is in GTR department (12%) out of total number of students in these two respectively departments.

The report previous years on student employability showed that 76% of engineers graduated were employed in different sectors (private; public; NGOs and owned business). 17% were continuing their studies mostly overseas. 7% were seeking employment or awaiting result of interview or could not be reached.

This is the fourth year of implementing the global vision of ITC's 2020-30 to train high 17000-plus engineers by 2030. To help facilitate this great ambition, English Section will have to commit to doing the work – fostering English language knowledge to our students with the promising results.

Annex 4. Minutes of CEVU Meeting.

	Résolu pendant la réunion	Responsable sur problèmes restants
I- Enseignement et Recherche		
1- Enseignement Scientifique		
I1, I2 : Requesting the lecturer who teach mathematics to follow the assigned schedule. Students request the Mathematics Lecturer and Physics Lecturer to highlight the key points during their lectures to aid in better understanding. Students request that all subjects be resumed on the Moodle platform, allowing them to access to the learning materials.	√	
I5-GCA : Students requested to use their precise GPA values, such as 2.9, 3.7, etc., rather than rounded figures like 2.0, 2.5, or 4.0 to ensure the efficiency for when apply for scholarship.	√	
I3-GAR, I4-GRU: Request a field trip for students.	√	
Enseignant GCA: Request to conduct online teaching, in case of makeup class but there is no room available.	√	
Enseignant SF: Students used AI tool to complete their assignments.	√	
3^{ème} cycle : <ul style="list-style-type: none"> – Graduate Students request the Institute to establish a partnership with Research4Life of Science Direct in order to gain a free access to certain journals under privileged conditions. – Request a room for the graduate school to facilitate their research. 	√	
2- Internet and e-learning		
I2-DTC, I3-I4 GGG, I5-GEE, I5-GIM, I3-GIC, I3-GTR, 3^{ème} cycle, I4-AMS, I4-GIM		
- WiFi speed Issued: lagging, frequent disconnections, and the ITC-Camp WiFi does not working.		Service informatique
- WiFi speed works properly for the students of the year 2021; however, it doesn't work for the students of the year 2023.		
- Request to install WiFi for AMS students, especially in LAB F201 & F202.		

- Request to install WiFi in building like Building-K, area surround building-F, and 6th floor of Building J.		
II- Matériel et hygiène		
Etudiants, Enseignants		
- Air conditioning problems: malfunction, not working properly, and need to be repaired in the following rooms: SF2, SF1, F-S2, F-306, F-403, F-404, J-601, J-607, J-701, J-702, J-703, J-704.		Service Technique et Service Technique
- Projector (LCD) Problem: malfunction, not working properly, and need to be repaired in the following room: F-403, F-404, E204, F-310, F-306, building E.		
- Request a Projector that has high resolution, and Request to change HDMI in hall S1, S2		
- Request to install a fixed Projector in all classroom, epecially at K-405		
- Request to repair slide, microphone in room F-201, F-202, F-209, F-403, F-404, F-S2, and room at building-E		
- Request Microphone and Speakers room J-701, J-702, J-703, J-704, F-403		Service Technique
- Request to install more fans in room E-204, F-401 and F-404		
III- Parking		
Etudiants :		
- Request parking attendants to assist during rush hours or when it is difficult to find parking spots, especially for female students.	√	
- Request an update on the motorcycle parking ticket to state "Not responsible after 8:30 PM," as it did previously, instead of 5 PM.	√	
IV- Others		
- Request to apply for the Social Security System (B.S.S) for all full-time staff.	√	
- Paying school fees through the bank delays receipt issuance. Many students, despite paying over a week ago, still struggle to get their receipts. Request for simplify the process for faster, and more convenient access.	√	
- Requesting security to help manage traffic and ensure safety while crossing the road for students at the entrance of the National Children's Hospital.	√	

Annex 5. List of Lecturer and Supervisors of GS for Master Programs.

1. List of Lecturers and Supervisors of M-MSE

No	Name of Lecturer	Sex	Qualification			Specialization
			Latest degree	From	Year	
1	BOEUT Sophea	F	Doctorate	Japan	2020	Sustainable Resources Engineering
2	CHEA Monyneath	F	Master	Japan	2022	Material Science and Engineering
3	CHHANG Sophy	M	Doctorate	France	2018	Civil Engineering
4	DOUNG Piseth	M	Doctorate	Japan	2020	Civil Engineering
5	HAN Virak	M	Doctorate	Japan	2006	Construction Materials
6	HENG Sounean	F	Doctorate	France	2022	Civil Engineering
7	HIN Raveth	M	Doctorate	France	2017	Mechanics of materials
8	KAN Kuchvichea	M	Doctorate	Belgium	2020	Geomechanics
9	KY Sambath	M	Doctorate	France	2017	Civil Engineering
10	LENG Khundadino	M	Doctorate	France	2023	Civil Engineering
11	LIM Sovanvichet	M	Doctorate	France	2013	Civil Engineering
12	LY Hav	M	Master	Belgium	2007	Sciences Appliquées, Service de Génie Civil
13	POUV Keang Se	M	Doctorate	France	2011	Fluids mechanics
14	PROK Narith	M	Doctorate	Japan	2016	Civil Engineering
15	SRY Vannei	M	Doctorate	Japan	2018	Mechanical Properties of Materials

2. List of Lecturers and Supervisors of M-ETM

No	Name of Lecturer	Sex	Qualification			Specialization
			Latest degree	From	Year	
1	AM Sokchea	M	Doctorate	France	2016	Electrical Engineering
2	BUN Menghorng	M	Master/PhD student	Thailand	2021	Information and Communication Technology for Embedded Systems
3	CHAN Sarin	M	Doctorate	Indonesia	2011	Refrigeration and Air Conditioning
4	CHHLONH Chhith	M	Doctorate	France	2024	Genie Electrique
5	CHRIN Phok	M	Doctorate	France	2016	Electrical Energy
6	ENG Chandoeun	M	Doctorate	Japan	2018	Geology
7	ENG Samphors	F	Master/PhD student	Indonesia	2018	Electrical Engineering
8	KHON Kimsrorn	M	Doctorate	France	2022	Electrical Engineering
9	KHOUN Rithymean	M	Master	Belgium	2004	Mechanics
10	PECH Sopheap	F	Doctorate	Cambodia	2023	Energy Technology and Management

11	SORN Darong	M	Master/PhD student	China	2018	Electronic Science and Technology
12	SUK Sievlong	M	Master	Indonesia	2023	Electrical Engineering
13	TEA Sokly	F	Master	Thailand	2024	Early Childhood Education
14	VAI Vannak	M	Doctorate	France	2017	Electrical Engineering
15	VONGCHANH Kinnaeth	F	Doctorate	Indonesia	2010	Engineering in Mechanical Engineering
16	YOU Lyhour	M	Master	Thailand	2024	High-Voltage Insulation and Transmission Technology Program

3. List of Lecturers and Supervisors of M-WEE

No	Name of Lecturer	Sex	Qualification			Specialization
			Latest degree	From	Year	
1	ANN Vannak	M	Doctorate	Spain	2015	Water Science and Technology
2	BUN Saret	M	Doctorate	Japan	2019	Environmental Engineering
3	CHHUON Kong	M	Doctorate	Philippines	2016	Environmental Engineering
4	DOUNG Ratha	M	Doctorate	Philippines	2015	Environmental Engineering
5	EANG Khy Eam	M	Doctorate	Japan	2018	Sustainable Resources Engineering
6	HAM Phaly	M	Doctorate	Japan	2022	Environmental Engineering
7	HEU Rina	F	Doctorate	Japan	2020	Civil and Environmental Engineering
8	KET Pinnara	F	Doctorate	Belgium	2019	Agricultural Science and Biological Engineering
9	LUN Sambo	M	Master/PhD student	Japan	2010	Environmental Engineering
10	PEN Sytharith	M	Doctorate	Japan	2018	Environmental Engineering
11	SANG Davin	F	Doctorate	France	2022	Environmental Engineering
12	SOK Ty	M	Doctorate	France	2021	Functional Ecology and Environment
13	SONG Layheang	M	Doctorate	France	2021	Water Resources
14	THENG Vouchlay	F	Doctorate	Japan	2022	Civil and Environmental Engineering

4. List of Lecturers and Supervisors of M-AIE

No	Name of Lecturer	Sex	Qualification			Specialization
			Latest degree	From	Year	
1	EK Pichmony	F	Doctorate	USA	2021	Food Science
2	DOEURN Seyha	F	Master	Japan	2022	Environmental Management
3	HOR Sivmey	F	Doctorate	France	2020	Food Science
4	HOUN Peany	F	Doctorate	Japan	2019	Chemical Engineering
5	IN Sokneang	F	Doctorate	France	2012	Science and processes of Food and bio-products, Agriculture Biology Environment Health

6	KET Pinnara	F	Doctorate	Belgium	2019	Agricultural Science and Biological Engineering
7	KHOEURN Kimleang	F	Doctorate	Japan	2019	Sustainable Resources Engineering
8	MITH Hasika	M	Doctorate	Belgium	2014	Food Science
9	MORM Elen	F	Doctorate	Belgium	2021	Food Technology
10	PENG Chanthol	F	Doctorate	Japan	2019	Life Science and Technology
11	PHAT Chanvorleak	F	Doctorate	South Korea	2016	Food Chemistry
12	SOUNG Malyna	F	Doctorate	France	2017	Mécanismes des Interactions Parasitaires Pathogènes et Symbiotiques
13	SROY Sengly	F	Doctorate	France	2021	Food Science
14	TAN Reasmey	F	Doctorate	Japan	2011	Bioengineering
15	TY Boreborey	F	Doctorate	Philippines	2016	Groundwater treatment process, Environmental Engineering
16	YEOUN Sereyvath	M	Doctorate	South Korea	2014	Biotechnology

5. List of Lecturers and Supervisors of M-ECS

No	Name of Lecturer	Sex	Qualification			Specialization
			Latest degree	From	Year	
1	CHAN Sophal	M	Master	Thailand	2020	Information Technology
2	HENG Rathpisey	M	Master	Indonesia	2020	Electrical Engineering and Information Technology
3	KONG Phutphalla	M	Doctorate	Belgium	2021	Computer Vision and Engineering
4	MUTH Boravy	M	Doctorate	South Korea	2021	Nuclear Engineering
5	PEN Chentra	M	Master/PhD student	Cambodia	2011	Applied Mathematics
6	PHOK Ponna	M	Master	Cambodia	2010	Sciences in mathematics
7	PICH Reatrey	M	Master/PhD student	Thailand	2018	Computing in Engineering Systems
8	SOK Kimheng	M	Master	France	2008	Network System and Architecture
9	TAL Tong Sreng	M	Master	Cambodia	2018	Information and Communication Technology
10	TANN Chantara	F	Master	Cambodia	2010	Mathematics
11	TITH Dara	M	Doctorate	Japan	2020	Information Technology
12	UN Lykong	F	Master	France	2023	Data and Intelligence for Smart System
13	VALY Dona	M	Doctorate	Belgium	2020	Science de l'ingénieur et technologie
14	YOU Vanndy	M	Master	India	2016	Computer Science

6. List of Lecturers and Supervisors of M-MIC

No	Name of Lecturer	Sex	Qualification			Specialization
			Latest degree	From	Year	
1	AM Sokchea	M	Doctorate	France	2016	Electronics
2	CHHITH Saosometh	M	Master	South Korea	2010	Mechanical Engineering
3	CHHORN Sopheaktra	M	Master	Thailand	2018	Electronics - Bio-medical
4	CHRIN Phok	M	Doctorate	France	2016	Electrical Energy
5	KIM Bunthern	M	Doctorate	France	2019	Electrical Engineering
6	PEC Rothna	M	Doctorate	South Korea	2017	Electrical and Electronics Engineering, Communication and Signal Processing
7	PHAUK Sökkhey	M	Doctorate	Japan	2021	Interdisciplinary Intelligent Systems
8	SIM Tepmony	M	Doctorate	France	2016	Applied Mathematics, Signal and Image Processing
9	SOKHAL Aylik	M	Master	France	2023	Industrial Performance and Mechatronic System
10	SRANG Sarot	M	Doctorate	Japan	2014	Dynamical System Modeling, Estimation and Adaptive Control
11	SRENG Sokchenda	M	Doctorate	France	2012	Telecommunications and Network
12	SRY Vannei	M	Master	Indonesia	2011	Mechanical Engineering
13	THOURN Kosorl	M	Doctorate	Japan	2009	Electrical Engineering and Electrical Systems
14	TOUCH Sopheak	M	Master	Cambodia	2024	Data Science
15	VALY Dona	M	Doctorate	Belgium	2020	Science de l'ingénieur et technologie

7. List of Lecturers and Supervisors of M-TIE

No	Name of Lecturer	Sex	Qualification			Specialization
			Latest degree	From	Year	
1	CHEA Savuth	M	Doctorate	France	2007	Highway Engineering and Design
2	CHHENG Ratha	M	Master	Cambodia	2021	Transport Engineering
3	HASH Chanly	M	Master	Japan	2008	Architecture, Urban and Regional Planning
4	HENG Sokbil	M	Doctorate	Japan	2011	Geotechnical Engineering
5	KAING Saoserey	M	Doctorate	France	2008	Bridge Engineering
6	PHUN Veng Kheang	M	Doctorate	Japan	2013	Transport Engineering, Planning, Environment, and Policy
7	PLACK Sokhit	M	PhD student	Cambodia	2023	Transport Engineering
8	SAUM Narith	M	Doctorate	Thailand	2022	Transportation Engineering
9	SIM Tepmony	M	Doctorate	France	2016	Applied Mathematics, Signal and Image Processing
10	YANG Panha	F	Master	Cambodia	2021	Transport Engineering

11	YEN Yat	M	Doctorate	China	2018	Urban Mobility and Sustainability
----	---------	---	-----------	-------	------	-----------------------------------

8. List of Lecturers and Supervisors of M-DAS

No	Name of Lecturer	Sex	Qualification			Specialization
			Latest degree	From	Year	
1	CHAN Sophal	M	Master	Thailand	2020	Information Technology
2	HAS Sothea	M	Doctorate	France	2022	Applied Math
3	LIN Mongkolser	M	Doctorate	Thailand	2014	Applied Mathematics
4	LONG Pakrigna	M	Master	Thailand	2018	Computing in Engineering Systems
5	MUTH Boravy	M	Doctorate	South Korea	2021	Nuclear Engineering
6	NHIM Malai	M	Master	Belgium	2022	Statistics and Data Science
7	OL Say	M	Master	Philippines	2015	Cryptography
8	PEN Chentra	M	Master	Cambodia	2011	Applied Mathematics
9	PHAUK Sökkhey	M	Doctorate	Japan	2021	Interdisciplinary Intelligent Systems
10	SIM Tepmony	M	Doctorate	France	2016	Applied Mathematics, Signal and Image Processing
11	SOEUNG Senghong	M	Master	Cambodia	2023	Data Science
12	TANN Chantara	F	Master	Cambodia	2010	Mathematics
13	TE Sonita	F	Master	France	2022	Science in informatics at Grenoble
14	TOUCH Sopheak	M	Master	Cambodia	2024	Data Science
15	VALY Dona	M	Doctorate	Belgium	2020	Science de l'ingénieur et technologie
16	YOU Vanndy	M	Master	India	2016	Computer Science

Annex 6. List of Master Thesis.

(List arranged by degree, field/specialization, and chronological order)

1. M-MSE

This list shows the theses successfully defended in 2024 only. Please consult our website for the exhaustive list theses from 2011 to 2023.

- RITH Borey (2024). *Behavior of alkali-activated material at early age and long term*, [Master Thesis, Materials and Structural Engineering, Institute of Technology of Cambodia]
- CHEA Henghout (2024). *Study on Pullout Resistance of Tyfo® FibrAnchors Inserted into Relatively High Strength Concrete Specimen*, [Master Thesis, Materials and Structural Engineering, Institute of Technology of Cambodia]
- VISETH Setha (2024). *Development of Low Environmental Impact Concrete Based on Dredged Sediment*, [Master Thesis, Materials and Structural Engineering, Institute of Technology of Cambodia]
- KHOM Vivutd (2024). *Etudes statistique et numérique des mécanismes de dégradation lors d'une réaction alcali-granulats*, [Master Thesis, Materials and Structural Engineering, Institute of Technology of Cambodia]
- CHHENG Brossour (2024). *Development of new low-carbon binders using different activation systems*, [Master Thesis, Materials and Structural Engineering, Institute of Technology of Cambodia]
- POR Somethea (2024). *Elastic analytical model for bolted end-plate steel-concrete connections*, [Master Thesis, Materials and Structural Engineering, Institute of Technology of Cambodia]
- YAM Vanny (2024). *Validation on Proposed Equation for Pullout Resistance of Tyfo® FibrAnchors Inserted into Concrete Cylinder*, [Master Thesis, Materials and Structural Engineering, Institute of Technology of Cambodia]
- MENG Senghor (2024). *Study of transport of chemical products in a fractured porous medium subjected to a dissolution reaction*, [Master Thesis, Materials and Structural Engineering, Institute of Technology of Cambodia]
- BUN Chanlina (2024). *Comparative Analysis of Road Pavement Design Standards: A Study of Road Note, AASHTO, AUSTROADS, and Belgian Guidelines*, [Master Thesis, Materials and Structural Engineering, Institute of Technology of Cambodia]
- BUT Chan Seyha (2024). *Various Pavement Management Systems (PMS), Already applied or to be applied, for road management in Cambodia*, [Master Thesis, Materials and Structural Engineering, Institute of Technology of Cambodia]
- KONG Aruntitya (2024). *Discrete yield analysis approach applied to the evaluation of shear capacity of slender RC beams without shear reinforcement*, [Master Thesis, Materials and Structural Engineering, Institute of Technology of Cambodia]

2. M-ETM

This list shows the theses successfully defended in 2024 only. Please consult our website for the exhaustive list theses from 2015 to 2023.

- HEANG Sokleap (2024). *Service Restoration in the Distribution System with Voltage Regulation Devices and PV-Based Distributed Generation using Improved Sequential Opening Branches (ISOB)*, [Master Thesis, Energy Technology and Management Engineering, Institute of Technology of Cambodia]
- BUNTOUN Sophanarith (2024). *Optimal Placement of Electric Vehicle Charging Stations Using Mixed-Integer Linear Programming: A Case Study in Cambodia*, [Master Thesis, Energy Technology and Management Engineering, Institute of Technology of Cambodia]
- NEOV Yoklin (2024). *Comparative Analysis of Different Clustering Techniques in Hybrid AC/DC Microgrid*, [Master Thesis, Energy Technology and Management Engineering, Institute of Technology of Cambodia]
- MEL Daravann (2024). *Economic Study on Integrating PV-DG with Grid-Tie: Case Study in Cambodia*, [Master Thesis, Energy Technology and Management Engineering, Institute of Technology of Cambodia]

- MON Chanbumeay (2024). *Reliability Study on the Placement of Electric Vehicle Charging Stations in the Distribution Network*, [Master Thesis, Energy Technology and Management Engineering, Institute of Technology of Cambodia]
- PET Songchhay (2024). *Load Profile Estimation with Electric Vehicle Integration in Phnom Penh*, [Master Thesis, Energy Technology and Management Engineering, Institute of Technology of Cambodia]

3. M-WEE

This list shows the theses successfully defended in 2024 only. Please consult our website for the exhaustive list theses from 2014 to 2023.

- SOT Chann Tola (2024). *Effect of different irrigation methods and agronomy practices on water rice productivity in soil column-based experiments*, [Master Thesis, Water and Environmental Engineering, Institute of Technology of Cambodia]
- PHOL Mengheak (2024). *Effect of Different methods for water saving for rice cultivation at CARDI, Cambodia*, [Master Thesis, Water and Environmental Engineering, Institute of Technology of Cambodia]
- KHOEUN Romduol (2024). *Investigation of hydrological alteration in Sekong and Sesan River Basin of the Lower Mekong Basin*, [Master Thesis, Water and Environmental Engineering, Institute of Technology of Cambodia]

4. M-AIE

This list shows the theses successfully defended in 2024 only. Please consult our website for the exhaustive list theses from 2015 to 2023.

- SOVANN Rathana (2024). *Effects of rice grain with intermediate amylose content and extrusion conditions on properties of rice cereal*, [Master Thesis, Agro-Industrial Engineering, Institute of Technology of Cambodia]
- LY Hassany (2024). *Effects of High Amylose Rice and Extrusion Conditions on Properties of Rice Vermicelli*, [Master Thesis, Agro-Industrial Engineering, Institute of Technology of Cambodia]
- PHEAP Davin (2024). *Development of Spicy Sour Seasoning for Daily Use*, [Master Thesis, Agro-Industrial Engineering, Institute of Technology of Cambodia]

5. M-ECS

This list shows the theses successfully defended in 2024 only. Please consult our website for the exhaustive list theses from 2015 to 2023.

- HAM Heng (2024). *Online Khmer Handwritten Text Recognition for Teaching and Learning Assistance*, [Master Thesis, Computer Science, Institute of Technology of Cambodia]
- EM Hengly (2024). *Word Spotting on Khmer Printed Documents*, [Master Thesis, Computer Science, Institute of Technology of Cambodia]
- LY Kimleang (2024). *Khmer Question-Answering by Fine-tuning Pre-trained Model*, [Master Thesis, Computer Science, Institute of Technology of Cambodia]
- CHAN Both (2024). *CNN-based Reinforcement Learning with Policy Gradient for Khmer Chess*, [Master Thesis, Computer Science, Institute of Technology of Cambodia]

6. M-MIC

This list shows the theses successfully defended in 2024 only. Please consult our website for the exhaustive list theses from 2017 to 2023.

- SOUN Dalin (2024). *Gradient-Based Optimization of Core-Shell Nanoparticles with Discrete Materials for Metasurface Applications*, [Master Thesis, Mechatronics, Information and Communication Engineering, Institute of Technology of Cambodia]
- TANG Sou Bun (2024). *Smart Controller for PMDC Motor*, [Master Thesis, Mechatronics, Information and Communication Engineering, Institute of Technology of Cambodia]
- CHEK Nita (2024). *Tuning Hyperparameters on Gym Environment Inverted Pendulum*, [Master Thesis, Mechatronics, Information and Communication Engineering, Institute of Technology of Cambodia]

- CHHAY Monyvann (2024). *Enhanced Robot Navigation Through Reinforcement Learning with Khmer Direction Recognition*, [Master Thesis, Mechatronics, Information and Communication Engineering, Institute of Technology of Cambodia]
- PHON Lundy (2024). *State-of-Health Estimation for Lithium-ion Battery using Machine Learning*, [Master Thesis, Mechatronics, Information and Communication Engineering, Institute of Technology of Cambodia]
- SEK Pechmunivann (2024). *Fine-tune FaceNet pretrained weight with Siamese network on Cambodian FaceDataset*, [Master Thesis, Mechatronics, Information and Communication Engineering, Institute of Technology of Cambodia]
- HOR Hakeng (2024). *Application of total energy control system for fixed-wing unmanned aerial vehicle*, [Master Thesis, Mechatronics, Information and Communication Engineering, Institute of Technology of Cambodia]
- OUK Leakana (2024). *Investigation on Low-Complexity PPS Detection for 5G Mobile Cellular Network*, [Master Thesis, Mechatronics, Information and Communication Engineering, Institute of Technology of Cambodia]
- SAI Thavath (2024). *Development of Controller Node for Smart Greenhouse Application*, [Master Thesis, Mechatronics, Information and Communication Engineering, Institute of Technology of Cambodia]
- HORT Sovanvichea (2024). *6DOF flight control simulation for a rocket with fin stabilization by using LQR controller*, [Master Thesis, Mechatronics, Information and Communication Engineering, Institute of Technology of Cambodia]
- HOEM Rachhat (2024). *Flight control simulation of a fixed-wing uav using lqr controller*, [Master Thesis, Mechatronics, Information and Communication Engineering, Institute of Technology of Cambodia]
- HIM Vannthorng (2024). *Designing a Self-Stabilized Thrust Vector Control System for Small-Scale Rockets*, [Master Thesis, Mechatronics, Information and Communication Engineering, Institute of Technology of Cambodia]

7. M-TIE

This list shows the theses successfully defended in 2024 only. Please consult our website for the exhaustive list theses from 2021 to 2023.

- SUON Kosal (2024). *Examining Passenger Loyalty in Phnom Penh Public Bus System*, [Master Thesis, Transport Engineering, Institute of Technology of Cambodia]
- SAM Sothearo (2024). *The Study of Water Taxi Operation and Traffic in inland Waterway Transportation in Phnom Penh City*, [Master Thesis, Transport Engineering, Institute of Technology of Cambodia]
- SENG Hongheng (2024). *Traffic management during flyover construction: A case study of flyover 2004, Phnom Penh*, [Master Thesis, Transport Engineering, Institute of Technology of Cambodia]
- SOM Oeurn Keo (2024). *Minimum Standards of Traffic Safety Devices at Primary School Zone: Case Study in Phnom Penh City*, [Master Thesis, Transport Engineering, Institute of Technology of Cambodia]

8. M-DAS

This list shows the theses successfully defended in 2024 only. Please consult our website for the exhaustive list theses in 2023.

- TOUCH Sopheak (2024). *Energy Demand Forecast For Electricity Operators In Cambodia*, [Master Thesis, Data Science, Institute of Technology of Cambodia]
- HOR Hang (2024). *Temporal Graph Learning with Application to Large-Scale Flight Traffic Prediction*, [Master Thesis, Data Science, Institute of Technology of Cambodia]
- SAM Lyheng (2024). *Undergraduate Student Dropout Prediction With Class Balancing Techniques*, [Master Thesis, Data Science, Institute of Technology of Cambodia]
- HAN Chandeth (2024). *Rubber Prices Forecasting: A Comparative Study Of Univariate And Multivariate Analysis With Multiple Predictive Models*, [Master Thesis, Data Science, Institute of Technology of Cambodia]
- SEIREY Chhunheng (2024). *Utilizing data mining and AI to enhance Cambodian high school student performance and stakeholder success*, [Master Thesis, Data Science, Institute of Technology of Cambodia]

- NUON Roatny (2024). *Predictive Analysis of Stock Closing Prices: A Comparative Study of LSTM, SVM, and XGBoost*, [Master Thesis, Data Science, Institute of Technology of Cambodia]
- POV Phannet (2024). *Bus Arrival Time Prediction Using Machine Learning Approaches*, [Master Thesis, Data Science, Institute of Technology of Cambodia]
- LI Nita (2024). *Unlocking Agricultural Potential with Machine Learning Approach: A Soil-Centric Approach to Crop Selection in Cambodia*, [Master Thesis, Data Science, Institute of Technology of Cambodia]
- HENG Seyha (2024). *Comparative Study of Clustering Analysis: On KIVAEnhancing Microfinance Impact Through Cluster-driven Loan Strategies in Cambodia*, [Master Thesis, Data Science, Institute of Technology of Cambodia]

Annex 7. List of Master Publications.

1. Lists of Publications M-MSE

This list shows the papers published by the graduates in 2024 only. Please consult our website for more information on students' publications.

NA

2. Lists of Publications M-ETM

This list shows the papers published by the graduates in 2024 only. Please consult our website for more information on students' publications.

1. Sokleap Heang, Vannak Vai & Samphors Eng (2024). Service Restoration in the Distribution System with Voltage Control Devices using Improved Sequential Opening Branches (ISOB). Techno-SRJ_11_26
2. Buntheoun Sophanarith, KIM Bunthern & VAI Vannak (2024). Optimal Placement of Electric Vehicle Charging Stations Using Mixed-Integer Linear Programming: A Case Study in Cambodia. Techno-SRJ_11_21
3. Yoklin Neov, Oudaya Eth & Kimsrornn Khon (2024). Comparative Analysis of Different Clustering Techniques in Hybrid AC/DC Microgrid. Techno-SRJ_11_22
4. Daravann MEL, Sokchea AM & Phok CHRIN (2024). Economic Study on Integrating PV-DG with Grid-Tie: Case Study in Cambodia. Techno-SRJ_12_15
5. Mon Chanbumey, Kim Bunthern & Chheng Monyvathna (2024). Reliability Study on the Placement of Electric Vehicle Charging Stations in the Distribution Network of Cambodia. Techno-SRJ_12_26
6. PET Songchhay, KIM Bunthern & CHHENG Monyvathna (2024). Prediction on Load model for future load profile of Electric Vehicle charging demand in Phnom Penh. Techno-SRJ_12_24

3. Lists of Publications M-WEE

This list shows the papers published by the graduates in 2024 only. Please consult our website for more information on students' publications.

1. Chantola Sot, KET Pinnara, MA Chengxiang & LAI Chenda (2024). Effect of Different Irrigation Methods on Water Use Efficiency in Rice Soil Column Test. Techno-SRJ_11_29
2. Mengheak Phol, KET Pinnara, MA Chengxiang & LAI Chenda (2024). Effect of Different Water-saving Irrigation Methods for rice cultivation, Case study in Cambodia. Techno-SRJ_11_30
3. Romduol Khoeun, Ratha Sor, Kimsan Chann, Sophea Rom Phy, Chantha Oeurng & Ty Sok (2024). The Impacts of Dams on Streamflow in Tributaries to the Lower Mekong Basin. sustainability-3021569

4. Lists of Publications M-AIE

This list shows the papers published by the graduates in 2024 only. Please consult our website for more information on students' publications.

1. SOVANN Rathana, MITH Hasika & EK Pichmony (2024). Physico-chemical Characteristics of Rice-based Cereal Processed by Twin-screw Extrusion and Microwave Cooking. Techno-SRJ_11_31
2. LY Hassany, MITH Hasika & PHUONG Hengsim (2024). Investigation of the Influence of Extrusion Parameters on Cambodia Extruded Rice Vermicelli. Techno-SRJ_11_32
3. PHEAP Davin, IN Sokneang & MORM Elen (2024). Evaluate the Potential Changes in Physico-Chemical and Microbiological Quality of Spicy Sour Seasoning During Storage. Techno-SRJ_11_33
4. Kimhouy Nou, Sereyvath Yoeun, Chanvorleak Phat, Vattana Mom, Sovannmony Lay, Caroline Douny, Marie-Louise Scippo & Hasika Mith (2025). Impact of Smoking Materials on Smoked Fish Quality and Polycyclic Aromatic Hydrocarbons Contamination. Techno-SRJ-0288

5. Lists of Publications M-ECS

This list shows the papers published by the graduates in 2024 only. Please consult our website for more information on students' publications.

1. Heng Ham, Dona Valy & Phutphalla Kong (2024). Empowering Education with Online Khmer Handwritten TextRecognition for Teaching and Learning Assistance. Techno-SRJ_12_05
2. Hengly Em, Dona Valy, Bernard Gosselin & Phutphalla Kong (2024). Word Spotting on Khmer Printed Documents. Techno-SRJ_12_19
3. Kimleang Ly, Dona Valy & Phutphalla Kong (2024). Khmer question-answering by fine-tuning from pre-trained model. Techno-SRJ_12_09
4. Both Chan, Dona Valy & Phutphalla Kong (2024). CNN-based Reinforcement Learning with Policy Gradient for Khmer Chess. Techno-SRJ_12_17

6. Lists of Publications M-MIC

This list shows the papers published by the graduates in 2024 only. Please consult our website for more information on students' publications.

1. Nita Chek, Rothna Pec & Sokchenda Sreng (2024). Tuning Hyperparameters Learning Rate and Gamma in Gym Environment Inverted Pendulum. Techno-SRJ_12_20
2. Leakana Ouk, Rothna Pec & Sopkeakra Chhorn (2024). Low-Complexity Detection of Primary Synchronization Signal for 5G New Radio Terrestrial Cellular System. Techno-SRJ_12_13
3. Thavath Sai, PEC Rothna & HEL Chanthan (2024). Development of IoT-based General Purpose Greenhouse Controller for Smart Agriculture and a Case Study onMushroom Growth Control System. Techno-SRJ_11_23

7. Lists of Publications M-TIE

This list shows the papers published by the graduates in 2024 only. Please consult our website for more information on students' publications.

1. Kosal Suon, Veng Kheang Phun & Narith Saum (2024). Examining Passenger Loyalty in Phnom Penh Public Bus System: A Structural Equation Modelling Approach. Techno-SRJ_12_12
2. Sothearo SAM, Veng Kheang PHUN & Panha YANG (2024). Should water taxi service in Phnom Penh be abandoned or sustained? Techno-SRJ_11_19
3. Hongheng SENG, Veng Kheang PHUN, Panha YANG & Narith SAUM (2024). Reducing traffic congestion during flyover construction: A case study of flyover construction at the intersection 2004, Phnom Penh, Cambodia. Techno-SRJ_11_37
4. Keo SOM OEURN, Panha YANG & Veng Kheang PHUN (2024). Minimum Standard of Traffic Safety Devices at Primary School Zone Black Spot in Phnom Penh. Techno-SRJ_11_24

8. Lists of Publications M-DAS

This list shows the papers published by the graduates in 2024 only. Please consult our website for more information on students' publications.

1. Hang Hor, Sokkhey Phauk, Gabor Benedek, Sothea Has & Pheak Neang (2024). Temporal Graph Learning with Application to Large-Scale Traffic Flight Prediction. Techno-SRJ_12_04
2. Lyheng Sam, Sokkhey Phauk & Valy Dona (2024). Undergraduate Student Dropout Prediction with Class Balancing Techniques. Techno-SRJ_12_02
3. Chhuhheng Seirey, Sokkhey Phauk & Say Ol (2024). Utilizing Data Mining And AI To Enhance Cambodian High School Student Performance And Stakeholder Success. Techno-SRJ_12_01
4. Phannet Pov, Sokkhey Phauk, Dona Valy & Narith Saum (2024). Bus Arrival Time Prediction Using Machine Learning Approaches. Techno-SRJ_12_03

Annex 8. List of Lecturers and Supervisors PhD

1. List of Lecturers and Supervisors of D-WAE

No	Name	Sex	Title	Qualification			Specialization
				Degree	From	Year	
1	ANN Vannak	M	Dr.	Doctorate	Spain	2015	Water Science and Technology
2	BUN Saret	M	Asst. Prof. Dr.	Doctorate	Japan	2019	Environmental Engineering
3	CHAN Rathborey	F	Dr.	Doctorate	Japan	2021	Environmental Engineering
4	CHHUON Kong	M	Asst. Prof. Dr.	Doctorate	Philippines	2016	Environmental Engineering
5	DOUNG Ratha	M	Asst. Prof. Dr.	Doctorate	Philippines	2015	Environmental Engineering
6	ENG Chandoeun	M	Asst. Prof. Dr.	Doctorate	Japan	2018	Geology
7	KET Pinnara	F	Asst. Prof. Dr.	Doctorate	Belgium	2019	Agricultural Science and Biological Engineering
8	OEURNNG Chantha	M	Prof.	Doctorate	France	2010	Hydrology and Water Resources
9	PENG Chanthol	F	Asst. Prof. Dr.	Doctorate	Japan	2019	Life Science and Technology
10	TAN Reasmey	F	Asst. Prof. Dr.	Doctorate	Japan	2011	Bio-engineering

2. List of Lecturers and Supervisors of D-ETM

No	Name	Sex	Title	Qualification			Specialization
				Degree	From	Year	
1	AM Sokchea	M	Asst. Prof. Dr.	Doctorate	France	2016	Electronics
2	BUN Long	M	Dr.	Doctorate	France	2011	Electrical Engineering
3	CHAN Sarin	M	Asst. Prof. Dr.	Doctorate	Indonesia	2011	Refrigeration and Air Conditioning
4	CHRIN Phok	M	Asst. Prof. Dr.	Doctorate	France	2016	Electrical Energy
5	KRET Kakada	M	Dr.	Doctorate	Japan	2019	Exploration Geophysics
6	OR Chanmoly	M	Assoc. Prof.	Doctorate	Japan	2014	Petroleum Production Engineering
7	VAI Vannak	M	Asst. Prof. Dr.	Doctorate	France	2017	Electrical Engineering
8	VONGCHANH Kinnaeth	F	Dr.	Doctorate	Indonesia	2010	Engineering in Mechanical Engineering

3. List of Lecturers and Supervisors of D-FTN

No	Name	Sex	Title	Qualification			Specialization
				Degree	From	Year	
1	EK Pichmony	F	Dr.	Doctorate	USA	2021	Food Science
2	IN Sokneang	F	Asst. Prof. Dr.	Doctorate	France	2012	Science and processes of Food

							and bio-products, Agriculture Biology Environment Health
3	MITH Hasika	M	Asst. Prof. Dr.	Doctorate	Belgium	2014	Food Science
4	PENG Chanthol	F	Asst. Prof. Dr.	Doctorate	Japan	2019	Life Science and Technology
5	PHAT Chanvorleak	F	Asst. Prof. Dr.	Doctorate	South Korea	2016	Food Chemistry
6	SOUNG Malyna	F	Asst. Prof. Dr.	Doctorate	France	2017	Mécanismes des Interactions Parasitaires Pathogènes et Symbiotiques
7	TAN Reasmeay	F	Asst. Prof. Dr.	Doctorate	Japan	2011	Bio-engineering

4. List of Lecturers and Supervisors of D-MIT

No	Name	Sex	Title	Qualification			Specialization
				Degree	From	Year	
1	CHRIN Phok	M	Asst. Prof. Dr.	Doctorate	France	2016	Electrical Energy
2	PHAUK Sokkhey	M	Asst. Prof. Dr.	Doctorate	Japan	2021	Interdisciplinary Intelligent Systems
3	PO Kimtho	M	Prof.	Doctorate	Japan	2009	Communication Engineering
4	SIM Tepmony	M	Asst. Prof. Dr.	Doctorate	France	2016	Applied Mathematics, Signal and Image Processing
5	SRANG Sarot	M	Asst. Prof. Dr.	Doctorate	Japan	2014	Dynamical System Modeling, Estimation and Adaptive Control
6	SRENG Sokchenda	M	Asst. Prof. Dr.	Doctorate	France	2012	Telecommunications and Network
7	VALY Dona	M	Asst. Prof. Dr.	Doctorate	Belgium	2020	Science de l'ingénieur et technologie

5. List of Lecturers and Supervisors of D-MSS

No	Name	Sex	Title	Qualification			Specialization
				Degree	From	Year	
1	DOUNG Piseth	M	Dr.	Doctorate	Japan	2020	Civil Engineering
2	ENG Chandoeun	M	Asst. Prof. Dr.	Doctorate	Japan	2018	Geology
3	HAN Virak	M	Asst. Prof. Dr.	Doctorate	Japan	2006	Construction Materials
4	HIN Raveth	M	Asst. Prof. Dr.	Doctorate	France	2017	Mechanics
5	KAN Kuchvichea	M	Asst. Prof. Dr.	Doctorate	Belgium	2021	Engineering Sciences and Technology
6	LIM Sovanvichet	M	Dr.	Doctorate	France	2012	Structural Engineering

7	NGUON Kollika	M	Asst. Prof. Dr.	Doctorate	Japan	2012	Water Hammer, Fluid-Structure Interaction
8	PHUN Veng Kheang	M	Asst. Prof. Dr.	Doctorate	Japan	2013	Transport Engineering, Planning, Environment, and Policy
9	SEANG Chansopheak	M	Asst. Prof. Dr.	Doctorate	France	2013	Civil and Mechanical Engineering
10	YOS Phanny	M	Asst. Prof. Dr.	Doctorate	Japan	2014	Materials Engineering

Annex 9. List of PhD Thesis.

(List arranged by degree, field/specialization, and chronological order)

1. List of PhD Theses D-WAE

1. SOK Ty (2021). *Dynamic transport of the sediment and nutrient in the Mekong River Basin and the role of the Tonle Sap Lake: Assessment coupling data and modelling approaches*, [Doctoral Thesis, Water and Environment, Institute of Technology of Cambodia]
2. SONG Layheang (2021). *Land use, surface runoff, soil erosion: multi-scale impact assessment of teak tree plantation management in a tropical humid mountainous agro-ecosystem*, [Doctoral Thesis, Water and Environment, Institute of Technology of Cambodia]
3. MUON Ratha (2022). *Termite bioturbation in Cambodia – From characterization to application*, [Doctoral Thesis, Water and Environment, Institute of Technology of Cambodia]
4. SANG Davin (2023). *Influence of the coagulation-flocculation-sedimentation on the adsorption of micropollutants onto activated carbon*, [Doctoral Thesis, Water and Environment, Institute of Technology of Cambodia]

2. List of PhD Theses D-ETM

1. KHON Kimsornn (2022). *Planning of Rural LV AC/DC Microgrids with PV and Storage*, [Doctoral Thesis, Energy Technology and Management, Institute of Technology of Cambodia]
2. PECH Sopheap (2023). *Source Rock Evaluation and Depositional Environment of Sedimentary rocks Characterization in Kampong-Som and Tonle Sap Sedimentary Basin, Onshore Cambodia*, [Doctoral Thesis, Energy Technology and Management, Institute of Technology of Cambodia]
3. SIO Sreymean (2024). *Reservoir Evolution of Kampong Som Basin, Onshore Cambodia*, [Doctoral Thesis, Energy Technology and Management, Institute of Technology of Cambodia]
4. CHHLONH Chhith (2024). *Rural Electrification Planning Strategies Towards LV Microgrids in Developing Countries – Case Study in Cambodia*, [Doctoral Thesis, Energy Technology and Management, Institute of Technology of Cambodia]
5. NEAK Kimhak (2024). *The Potential Cambodian Offshore Sedimentary Basins for Hydrocarbon Development: A Case Study of the Apsara Oil Field in the Khmer Basin*, [Doctoral Thesis, Energy Technology and Management, Institute of Technology of Cambodia]

3. List of PhD Theses D-FTN

1. SROY Sengly (2021). *Importance of Freshwater fish from Tonle Sap Lake for food and nutrition in Cambodia*, [Doctoral Thesis, Food Technology and Nutrition, Institute of Technology of Cambodia]
2. PHUONG Hengsim (2022). *Extrusion Coupled with Enzymatic Hydrolysis for the Extraction of Hydrosoluble Compounds of the Red Algae Gracilaria Gracilis*, [Doctoral Thesis, Food Technology and Nutrition, Institute of Technology of Cambodia]
3. YIN Molika (2022). *Study of Turmeric (Curcuma Longa L.) Processes in Cambodia - Impact on Sensorial and Functional Quality*, [Doctoral Thesis, Food Technology and Nutrition, Institute of Technology of Cambodia]
4. NGET Sovannmony (2023). *Safety of meat products in Cambodia: modelling thermal inactivation for steaming and microwave processes*, [Doctoral Thesis, Food Technology and Nutrition, Institute of Technology of Cambodia]
5. OEUM Kakada (2024). *Exploration and exploitation of the rice-associated microbiome for sustainable agriculture in Cambodia*, [Doctoral Thesis, Food Technology and Nutrition, Institute of Technology of Cambodia]
6. SAY Mani (2024). *Evaluation of Physicochemical Qualities of Cooking Oils Sold in the Markets and Optimization of Cooking Oil Processing*, [Doctoral Thesis, Food Technology and Nutrition, Institute of Technology of Cambodia]
7. THANH Channmuny (2024). *Assessment of fish quality according to the production system (aquaculture versus wild ecosystem) and impact of Prahoc fermentation on its quality*, [Doctoral Thesis, Food Technology and Nutrition, Institute of Technology of Cambodia]

4. List of PhD Theses D-MIT

1. KONG Phutphalla (2022). *Visual Attention: Top-down and Bottom-up Information Relative Importance*, [Doctoral Thesis, Mechatronics and Information Technology, Institute of Technology of Cambodia]
2. KEAN Jeudy (2023). *Analyse et validation expérimentale de la plus basse fréquence utilisable dans une chambre réverbérante à parois métamatériaux pour des tests de Compatibilité ElectroMagnétique (CEM)*, [Doctoral Thesis, Mechatronics and Information Technology, Institute of Technology of Cambodia]
3. BAN Sam (2023). *Assessing the Potential of the Physical Internet for City Logistics Activities in Developing Countries*, [Doctoral Thesis, Mechatronics and Information Technology, Institute of Technology of Cambodia]
4. SRUN Channareth (2023). *Control Structure Design for Double-Stage Single Phase Grid-Connected Photovoltaic System*, [Doctoral Thesis, Mechatronics and Information Technology, Institute of Technology of Cambodia]
5. **KARTHIKEYAN Dinesh Kumar (2024). *Enhancing Learning with Visual Storytelling (VST): Designing Educational Workflow with Generative AI***, [Doctoral Thesis, Mechatronics and Information Technology, Institute of Technology of Cambodia]
6. **SREY Sophyn (2024). *States and Parameter Estimation for Adaptive Flight Control of Quadcopter***, [Doctoral Thesis, Mechatronics and Information Technology, Institute of Technology of Cambodia]

5. List of PhD Theses D-MSS

1. BUN Polyka (2022). *Development and Optimization of Ceramic Roof Tiles Incorporating with Industrial Waste*, [Doctoral Thesis, Materials Science and Structures, Institute of Technology of Cambodia]
2. HENG Sounean (2022). *The Study of the Cracking Sensitivity of Geopolymers*, [Doctoral Thesis, Materials Science and Structures, Institute of Technology of Cambodia]
3. MOM Sokvisal (2022). *Multi-scale modeling of thermal properties of cement-based materials*, [Doctoral Thesis, Materials Science and Structures, Institute of Technology of Cambodia]
4. OENG Thaileng (2023). *Analysis of Composite Beam by Taking into Account Inter-layer Slip and Uplift*, [Doctoral Thesis, Materials Science and Structures, Institute of Technology of Cambodia]
5. OUCH Vanthet (2023). *Behavior of a CLT-concrete composite floor with dovetail notched connectors*, [Doctoral Thesis, Materials Science and Structures, Institute of Technology of Cambodia]
6. **TAING Kimnenh (2024). *Architectural Design Process for a Bioclimatic Building: Study of methods and design strategies for building comfort in tropical climate***, [Doctoral Thesis, Materials Science and Structures, Institute of Technology of Cambodia]

Annex 10. List of Publications by PhD students.

(List arranged by degree, field/specialization, and chronological order)

1. List of Publications of D-WAE

1. Sok, T., Oeurng, C., Ich, I., Sauvage, S., & Sánchez, P. J. (2020). Assessment of Hydrology and Sediment Yield in the Mekong River Basin Using SWAT Model. *Water*. 12. 3503. 10.3390/w12123503.
2. Sok, T., Oeurng, C., Kaing, V., Sauvage, S., & Kondolf, M. G. & Sánchez Pérez José (2021). Assessment of Suspended Sediment Load Variability in the Tonle Sap and Lower Mekong Rivers, Cambodia.
3. L. Song et al., "Understory Limits Surface Runoff and Soil Loss in Teak Tree Plantations of Northern Lao PDR," *Water*, vol. 12, no. 9, 2020, doi: 10.3390/w12092327.
4. Muon, R., Lai, C., Bureau-Point, E., Chassagne, F., Wieringa, F., Berger, J., ... & Jouquet, P. (2022, May). Termite mounds in Cambodian paddy fields. Are they always kept for improving soil quality? In EGU General
5. Muon, R., Lai, C., Hervé, V., Zaiss, R., Chassagne, F., Bureau-Point, E., ... & Jouquet, P. Abundance, perceptions and utilizations of termite mounds in Cambodia. *Soil Use and Management*.
6. Sang, D., Cimetiere, N., Giraudet, S., Tan, R., Wolbert, D., & Le Cloirec, P. (2022). Online SPE-UPLC-MS/MS for herbicides and pharmaceuticals compounds' determination in water environment: A case study in France and Cambodia. *Environmental Advances*, 8, 100212.
7. Sang, D., Cimetiere, N., Giraudet, S., Tan, R., Wolbert, D., & Le Cloirec, P. (2022). Adsorption-desorption of organic micropollutants by powdered activated carbon and coagulant in drinking water treatment. *Journal of Water Process Engineering*, 49, 103190.
8. Sang, D., Chiemchaisri, C., & Chiemchaisri, W. (2022). Purification of polluted surface water by sponge moving bed membrane bioreactor with short hydraulic retention time operation. *Water and Environment Journal*, 36(4), 633-643.

2. List of Publications of D-ETM

1. Khon, K., Alvarez-Herault, M.-C., Vai, V., Fichtner S., Bun, L. et al. Optimal design of low voltage AC/DC microgrid. (SGE2020, Nov 2020, Nantes, France. Ffhal-030324217f
2. Khon K, Chhlonh C, Vai V, Alvarez-Herault M-C, Raison B, Bun L. Comprehensive Low Voltage Microgrid Planning Methodology for Rural Electrification. *Sustainability*. 2023; 15(3):2841. <https://doi.org/10.3390/su15032841>.
3. K. Khon, V. Vai, M.-C. Alvarez-Herault, L. Bun and B. Raison, "Planning of Low Voltage AC/DC Microgrid for Un-electrified Areas," *CIRE2021 - The 26th International Conference and Exhibition on Electricity Distribution*, Online Conference, 2021, pp. 2674-2678, doi: 10.1049/icp.2021.1518.
4. Pech, S., Eng, C., Or, C., Rahim, A. B., Heng, R., Buth, C., Sio, S. (2023). Depositional Environment of Sediments in Tonle Sap Sedimentary Basin, Western Part of Cambodia: Insights from Field and Geochemical Studies.
5. Sreymean Sio & Channmoly Or & Chandoeun Eng & Sopheap Pech & Tola Sreu (2024). Review of sedimentary basin evolution in Cambodia based on tectonic setting and logical information. *Berita Sedimentologi*, 2023 V. 49(2).
6. C. Chhlonh & M. -C. Alvarez-Herault & V. Vai and B. Raison (2024). Designing AC Low-Voltage Topologies for a Non-Electrified Area – A Case Study in Cambodia. 2023 IEEE PES Innovative Smart Grid Technologies Europe (ISGT EUROPE), Grenoble, France, 2023, pp. 1-6, doi: 10.1109/ISGTEUROPE56780.2023.10408246.
7. C. Chhlonh & M. -C. Alvarez-Herault & V. Vai and B. Raison (2024). Low-Voltage Microgrid Planning Strategies for an Isolated Village — A Case Study in Cambodia. *IECON 2023- 49th Annual Conference of the IEEE Industrial Electronics Society*, Singapore, Singapore, 2023, pp. 1-6, doi: 10.1109/IECON51785.2023.10312050.
8. C. Chhlonh & M. -C. Alvarez-Herault & V. Vai and B. Raison (2024). Comparative Planning of LVAC for Microgrid Topologies With PV-Storage in Rural Areas – Cases Study in Cambodia. 2022 IEEE

PES Innovative Smart Grid Technologies Conference Europe (ISGT-Europe), Novi Sad, Serbia, 2022, pp. 1-5, doi: 10.1109/ISGT-Europe54678.2022.9960511.

9. C. Chhlonh & B. Kim & P. Chrin & S. Am and T. Seng (2024). Four In-Wheel BLDC Motors Speed Control in EV Based on Hybrid Fuzzy-PI Controller Visual on GUI. 2021 International Symposium on Electrical and Electronics Engineering (ISEE), Ho Chi Minh, Vietnam, 2021, pp. 166-171, doi: 10.1109/ISEE51682.2021.9418790.
10. Neak Kimhak & kret kakda & Sreu Tola & Sirisokha Seang & Or Chanmoly (2023). The Milestone of Cambodian First Oil Production in the Khmer Basin, Gulf of Thailand. 10.4236/ojogas.2023.82003.
11. Neak Kimhak & kret kakda & Sreu Tola & Sirisokha Seang & Khoun Sokunthea & Or Chanmoly (2024). Integrated Petrophysical and Petrographical Studies for Reservoir Characterization: A Case Study of the Khmer Basin in Cambodian Water, Gulf of Thailand. International Journal of Oil, Gas and Coal Engineering. 10.11648/j.ogce.20241201.12.
12. Chea, V., Chan, S., Borzino, N. et al. Perceived impact of heat stress on health and productivity of tropical female garment workers— a comparison between cool and hot months. BMC Public Health 25, 1543 (2025). <https://doi.org/10.1186/s12889-025-22787-0>

3. List of Publications of D-FTN

1. Sroy, S., Arnaud, E., Servent, A., In, S., & Avallone, S. (2021). Nutritional benefits and heavy metal contents of freshwater fish species from Tonle Sap Lake with SAIN and LIM nutritional score. Journal of Food Composition and Analysis, 96, 103731.
2. Sroy, S., Servent, A., Sriwichai, W., In, S., & Avallone, S. (2021). Use of an experimental design to optimise the saponification reaction and the quantification of vitamins A1 and A2 in whole fish. International Journal for Vitamin and Nutrition Research.
3. Phuong, H., Massé, A., Dumay, J., Vandanjon, L., Mith, H., Legrand, J., & Arhaliass, A. (2022). Enhanced Liberation of Soluble Sugar, Protein, and R-Phycocyanin Under Enzyme-Assisted Extraction on Dried and Fresh *Gracilaria gracilis* Biomass. Frontiers in Chemical Engineering, 4, 21.
4. Yin, M., Bohuon, P., Avallone, S., In, S., & Weil, M. (2022). Postharvest treatments of turmeric (*Curcuma longa* L.) in Cambodia-Impact on quality. Fruits, 77 (6): pp. 1-13
5. Yin, M., Weil, M., Avallone, S., Lebrun, M., Conejero, G., In, S., & Bohuon, P. (2022). Impact of cooking and drying operations on color, curcuminoids, and aroma of *Curcuma longa* L. Journal of Food Processing and Preservation, 46(5), e16643.
6. Yin, M., Weil, M., Avallone, S., Maraval, I., Forestier-Chiron, N., Servent, A., IN, S. & Bohuon, P. (2023). Impact of cooking, drying and grinding operations on chemical content, functional and sensorial qualities of *Curcuma longa* L. Journal of Food Measurement and Characterization, 17(1), 998-1008.
7. Nget, S.; Mith, H.; Boué, G.; Curet, S.; Boillereaux, L. (2023) The Development of a Digital Twin to Improve the Quality and Safety Issues of Cambodian Pâté: The Application of 915 MHz Microwave Cooking. Foods, 12, 1187. <https://doi.org/10.3390/foods12061187>.
8. Oeum Kakada & Suong Malyna & Uon Kimsrong & Jobert Léa & Bellafore Stéphane & Comte Aurore & Thomas Emilie & KUOK Fidero & Moulin Lionel (2024). Comparison of plant microbiota in diseased and healthy rice reveals methylobacteria as health signatures with biocontrol capabilities. Frontiers in Plant Science. 15. 10.3389/fpls.2024.1468192.
9. Manit Say & Punlork Heng & Sela Kong & Chin Ping Tan & Sivchheng Phal & Yukleav Nat & Reasmey Tan (2024). Characterization of Physicochemical Properties of Cooking Oils Sold in Phnom Penh, Cambodia. Journal of Food Science and Nutrition Research 7 (2024): 28-36.
10. Thanh Channmuny & Mith Hasika & Peng Chanthol & Servent Adrien & Poss Charlie & Laillou Arnaud & PHAL Sophanith & Avallone Sylvie (2024). Assessment of the nutritional profiles and potentially toxic elements of wild and farmed freshwater fish in Cambodia. Journal of Food Composition and Analysis. 133. 106357. 10.1016/j.jfca.2024.106357.

4. List of Publications of D-MIT

1. Kong, P.; Mancas, M.; Gosselin, B.; Po, K. DeepRare: Generic Unsupervised Visual Attention Models. Electronics 2022, 11, 1696. <https://doi.org/10.3390/electronics11111696>. Available: <https://arxiv.org/abs/2109.11439>.
2. M. Matei, P. Kong, and B. Gosselin, “Visual Attention: Deep Rare Features,” CoRR, vol.

- abs/2005.12073, 2020, [Online]. Available: <https://arxiv.org/abs/2005.12073>. (Conferences)
3. Kong Phutphalla & Mancas Matei & Back Mr & Kheang Seng & Gosselin Bernard (2018). Do Deep-Learning Saliency Models Really Model Saliency?. 2331-2335. 10.1109/ICIP.2018.8451809.
 4. Kong Phutphalla & Mancas Matei & Kheang Seng & Gosselin Bernard (2018). Saliency and Object Detection.
 5. Kean, J., Raveu, N., Kaouach, H., Thourn, K., & Sreng, S. (2021, September). Analysis of Metamaterial Walls Reverberation Chamber by Using Modal Expansion Theory. In *2021 Asia-Pacific International Symposium on Electromagnetic Compatibility (APEMC)* (pp. 1-4). IEEE.
 6. Ban, S., Lauras, M., and Srang, S. (2020, Nov.). Toward Physical Internet-Enabled Supply Chain and Logistics Networks in Developing Countries. PRO-VE 2020 - 21st Working Conference on Virtual Enterprises, Valence, Spain. pp.379-389.
 7. Ban, S., Dan, A., Guinet, F., Portanuen, J., Lauras, M., and Srang, S. (2021, June). Assessing the potentialities of Physical Internet for Developing Countries Last Mile deliveries. IPIC 2021 - 8th International Physical Internet Conference, Online, Greece.
 8. Petitdemange, E., Sam Ban, S., Lauras, M., and Srang, S. (2023, May). Evaluate the Potential of the Physical Internet for Last Mile Delivery in Developing Countries. ICDSST 2023 - 9th International Conference on Decision Support System Technology, Albi, France. pp.203-215.
 9. Srun, C., Chrin, P., Am, S. & Kim, B. (2022). Design of MPPT Algorithms using Simulink Support Package for Arduino Hardware. 2. 151-161. 10.52088/ijesty.v2i4.397.
 10. Srun, C., Chrin, P., Am, S. & Kim, B. (2022). Modeling and Simulation of a Double-Stage Single-Phase Grid- Connected PV System. EPI International Journal of Engineering. 5. 16-20. 10.25042/epi-ije.022022.03.
 11. Srun, C., Lonh, V. & Ny, V. (2022). Experimental in Head Tracking Control of a Four Omni Wheeled Mobile Robot System. Indonesian Journal of Engineering and Science. 3. 15-26. 10.51630/ijes.v3i3.67.
 12. Srun C., Ny, V., Cheat, C., Ching, Sokheang & Ny, P. (2021). Development of Speech Recognition System Based on CMUSphinx for Khmer Language. International Journal of Innovative Research in Science Engineering and Technology. 6. 770-775.
 13. Srun C., Meas, S., Un, S., Saokun, K., & Ny, V. (2021). Prototype Self-Adaptive Traffic Light Control System Using Cameras. EPI International Journal of Engineering. 4. 127-133. 10.25042/10.25042/epi-ije.082021.04.
 14. K. Dinesh Kumar & Sarot Srang & Dona Valy (2023). Evaluating Text-To-Image Gans Performance: A Comparative Analysis of Evaluation Metrics. International Journal on Recent and Innovation Trends in Computing and Communication ISSN: 2321-8169. IJRITCC_June_2023_5125.
 15. K. Dinesh Kumar & Sarot Srang & Dona Valy (2023). Visual Storytelling: A Generative Adversarial Networks (Gans) and Graph Embedding Framework. International Journal on Recent and Innovation Trends in Computing and Communication ISSN: 2321-8169. IJRITCC_November_2023_5096.
 16. K. Dinesh Kumar & Sarot Srang & Dona Valy (2024). The power of Visual Storytelling: A deep learning framework for educational influence. International Journal of Intelligent Systems and Applications in Engineering ISSN 2147-6799. DIRDC2-614-PUB24_018
 17. S. Srey & V. Chhour & S. Srang (2024). Lumped Parameter Estimation of a Low Cost DC Motor for Position Controller Design. 2021 International Conference on Advanced Mechatronics, Intelligent Manufacture and Industrial Automation (ICAMIMIA), Surabaya, Indonesia, 2021, pp. 1-6, doi: 10.1109/ICAMIMIA54022.2021.9807810.
 18. Sophyn Srey & Sarot Srang (2024). Adaptive Controller Based on Estimated Parameters for Quadcopter Trajectory Tracking. International Journal of Robotics and Control Systems. Vol. 4, No. 2, 2024, pp. 480-501. ISSN 2775-2658.

5. List of Publications of D-MSS

1. Sounean, H., Kinda, H., & Aveline, D. (2021, May). The Cracking Sensitivity of a Na-Geopolymer. In *International RILEM Conference on Early-Age and Long-Term Cracking in RC Structures: CRC 2021* (pp. 165-174). Cham: Springer International Publishing.
2. Mom, S., Hoeun, S., Bernard, F., Kamali-Bernard, S., & Han, V. (2022). The Effect of Thermal Contact Conductance (TCC) Between Aggregate Inclusion and Matrix on Thermal Conductivity of Cement-Based Material. *International Journal of Integrated Engineering*, 14(5), 99-106.
3. Bun, P., Cyr, M., Lanieste, P., Bun, K. N., & Idir, R (2022). Concrete made of 100% recycled

materials - Feasibility study, Resources, Conservation and Recycling, Volume 180, 2022, 106199, doi.org/10.1016/j.resconrec.2022.106199.

4. Oeng, T., Keo, P., Guezouli, S., & Hjjaj, M. (2023). Large displacement analysis of two-layer beam-columns taking into account slip and uplift. *Engineering Computations*, 40(1), 265-295.
5. Ouch, V., Heng, P., Nyugen, Q.-H., Hugues, S., Thierry, S. (2023). An experimental investigation on the dovetail notched connection for cross-laminated-timber-concrete composite slabs. *European Journal of Environmental and Civil Engineering*, 27. 1-31. 10.1080/19648189.2023.2194351.
6. Ouch, V., Heng, P., Nyugen, Q.-H., Hugues, S., Thierry, S. (2022). A Dovetail Notched Connection for Cross-Laminated-Timber-Concrete Composite Slabs: Experimental Investigation. *SSRN Electronic Journal*. 10.2139/ssrn.4112748.
7. Ouch, V., Heng, P., Hugues, S., Thierry, S. (2023). An Experimental and Numerical Investigation on a Dovetail Notched Connection for Cross-Laminated-Timber-Concrete Composite Slabs. 3333-3341.10.52202/069179-0434.
8. Taing Kimninh & Leclercq Pierre (2022). Adoption contextuelle des pratiques pédagogiques : entre écosystèmes physique et logiciel, le cas de l'architecture bioclimatique en Asie du sud-est. *SHS Web of Conferences*. 147. 10.1051/shsconf/202214707002.
9. Taing Kimninh & Andre Philippe & Leclercq Pierre (2024). Analysis of Thermal Performance of Naturally Ventilated Residential Building in Tropical Climate: Case Study of Phnom Penh, Cambodia. *IOP Conference Series: Earth and Environmental Science*. 1199. 012038. 10.1088/1755-1315/1199/1/012038.
10. Kimninh Taing & Sigrid REITER & Virak Han & Pierre Leclercq (2024). Bioclimatic Design Guideline for Design Decision Support to Enhance Residential Building Thermal Performance in Tropical Region. *Sustainability*-3376709 (ISSN 2071-1050).

Annex 11. ITC lecturers in overseas post-graduate program (2024-2025).

No	Nom et prénom	Sexe	Départ.	Diplôme préparé	Université	Pays	Date de début de formation	Financement
1	KETH Kannary	F	GAR	PhD	Université Libre de Bruxelles	Belgique	October 2021	ARES
2	LONG Makara	M	GAR	PhD	Université de Liège	Belgique	October 2021	ARES
3	NUTH Visal	M	GCI	PhD	Université de Lorraine	France	Septembre 2024	BGF
4	SOM Chansamnang	M	GCI	PhD	INSA de Rennes	France	October 2022	ARES
5	BUN Menhorng	M	GEE	PhD	Toulouse INP	France	Septembre 2021	HEIP1
6	ENG Samphors	F	GEE	PhD	Université de Mons	Belgique	Juillet 2024	ARES
7	NOEV Yoklin	F	GEE	PhD	ITC	Cambodge	Septembre 2024	ITC
8	SENG Dararaskmey	F	GEE	Master	Chulalongkorn University	Thaïlande	Septembre 2023	Chulalongkorn
9	SORN Darong	M	GEE	PhD	Université Grenoble Alpes	France	Septembre 2024	AFD
10	HENG Ratha	M	GGG	PhD	Kyushu University	Japon	Septembre 2024	KIZUNA- JICA
11	YANN Theara	M	GGG	PhD	Chulalongkorn University	Thaïlande	Janvier 2025	ASEAN and Non-ASEAN
12	POENG Kokthay	M	GIC	PhD	Université de Namur	Belgique	2022-2025	CyberExcellence
13	TITH Dara	M	GIC	Post-Doct	Université de Namur	Belgique	2022-2025	Walloon
14	UN Lykong	F	GIC	PhD	LIG, Grenoble	France	2024-2027	BGF
15	CHAN Ratboren	M	GRU	PhD	Université Toulouse III - Paul Sabatier	France	Septembre 2023	BGF
16	LUN Sambo	M	GRU	PhD	ITC	Cambodge	Novembre 2024	HEIP2
17	PLACK Sokhit	M	GTI	PhD	ITC	Cambodge	Novembre 2023	ITC
18	CHIN Chan Daraly	M	GTR	PhD	Toulouse INP	France	Septembre 2022	BGF-MoEYS

Annex 12. ITC students in overseas post-graduate program (2024-2025).

No	Nom et prénom	Sexe	Départ	Diplôme préparé	Université	Pays	Financement
1	SIEK Mongkolreata	F	GAR	Research Student	Kagoshima University	Japan	Yonemori Scholarship Program
2	CHEA Dalin	F	GCA	Master	Kasetsart University	Thailand	Agro-Industry
3	KIN Sopharatt	F	GCA	Master	Hankuk University of Foreign Studies	South Korea	GKS
4	Lam Lika	F	GCA	Master	Chulalongkorn University	Thailand	ASEAN & Non-ASEAN Scholarship
5	Leanghy Sreyleak	F	GCA	Master	Chulalongkorn University	Thailand	ASEAN & Non-ASEAN Scholarship
6	Mong Sophymollyheng	F	GCA	Master	Kasetsart University	Thailand	KU scholarship
7	Oun Solida	F	GCA	Master	Chulalongkorn University	Thailand	ASEAN & Non-ASEAN Scholarship
8	Pa Sreypich	F	GCA	Master	Chulalongkorn University	Thailand	ASEAN & Non-ASEAN Scholarship
9	Pen Linda	F	GCA	Master	Chulalongkorn University	Thailand	ASEAN & Non-ASEAN Scholarship
10	Phon Mouyyi	F	GCA	Master	Chulalongkorn University	Thailand	ASEAN & Non-ASEAN Scholarship
11	Pit Sovannary	F	GCA	Master	Chulalongkorn University	Thailand	ASEAN & Non-ASEAN Scholarship
12	Ratana Un	F	GCA	Master	Kasetsart University	Thailand	Kasetsart's Agro-Industry Scholarships
13	Sen Sochetra	F	GCA	Master	Chulalongkorn University	Thailand	ASEAN & Non-ASEAN Scholarship
14	Seng Sreyna	F	GCA	Master	King Mongkut's University of Technology Thonburi (KMUTT)	Thailand	Multi Intellectual Scholarship
15	Sophymollyheng Mong	M	GCA	Master	Chulalongkorn University	Thailand	ASEAN & Non-ASEAN Scholarship
16	SORN Sourkea	F	GCA	Master	Auckland University of Technology	New Zealand	Manaaki New Zealand scholarship
17	Vannet Roschhuk	F	GCA	Master	Kasetsart University	Thailand	Agro-industry kasetsart university scholarship
18	Yann Theara	M	GCA	Master	Chulalongkorn University	Thailand	C2F
19	BUOY Chanbo	F	GCI	Master	ITC-INSA Rennes	Cambodia	

20	CHHEANG Seavpao	M	GCI	Master	ITC-INSa Rennes	Cambodia-France	ERASMUS +
21	EA Khunpanha	M	GCI	Master	ITC-INSa Rennes	Cambodia-France	ERASMUS +
22	HENG Rathanaksambath	M	GCI	Master	ITC -USPN	Cambodia-France	ERASMUS +
23	KAO Engentrak Reach	M	GCI	Master	ITC	Cambodia	
24	LEAN Karana	M	GCI	Master	ITC	Cambodia	
25	MEAS Samrith	M	GCI	Master	ITC-INSa Rennes	Cambodia-France	ERASMUS +
26	NGIN Vireakboth	M	GCI	Master	Sirindhorn International Institute of Technology, Thammasat University	Thailand	EFS Scholarship
27	NGOUN Bora	M	GCI	Master	ITC	Cambodia	
28	SAN Arunreaksmey	M	GCI	Master	ITC	Cambodia	
29	SON Brasna	M	GCI	Research Student	Kagoshima University	Japan	Yonemori Scholarship Program
30	SVAY Monineath	F	GCI	Master	ITC-INSa Rennes	Cambodia-France	ERASMUS +
31	THENG Kimtong	M	GCI	Master	ITC	Cambodia	
32	UNBOEUN Oudamputhi	M	GCI	Master	ITC	Cambodia	
33	VENG Leanghorng	F	GCI	Master	Sirindhorn International Institute of Technology	Thailand	EFS Scholarship
34	YOEUNTHY Vanntheng	M	GCI	Master	ITC	Cambodia	
35	CHEA Pheng ou	M	GEE	Master	Chulalongkorn University	Thailand	Chulalongkorn's scholarship
36	CHET Sopanha	M	GEE	Master	Université Grenoble Alpes (UGA)	France	AFD
37	CHHIM Roza	M	GEE	Master	Sirindhorn International Institute of Technology	Thailand	SIIT Graduate Scholarships
38	CHIM Chanrya	F	GEE	Master	Université Grenoble Alpes (UGA)	France	AFD
39	KLENG Vireak	M	GEE	Master	Institute of Technology of Cambodia	Cambodia	HEIP 2
40	LORM Rathana	M	GEE	Master	Sirindhorn International Institute of Technology	Thailand	SIIT Graduate Scholarships
41	MONYCHOT Sary	M	GEE	Master	Université Grenoble Alpes (UGA)	France	AFD

42	OENG Kechi	F	GEE	Master	Institute of Technology of Cambodia	Cambodia	HEIP 2
43	OEURN Sothea	M	GEE	Master	Université Grenoble Alpes (UGA)	France	AFD
44	PHON Lundy	M	GEE	Master	Université de Mons	Belgique	ARES
45	SEU Sophany	M	GEE	Master	Sirindhorn International Institute of Technology	Thailand	SIIT Graduate Scholarships
46	TAING Chhay Leng	F	GEE	Master	Toulouse INP	France	
47	TIV Dararith	M	GEE	Master	Sirindhorn International Institute of Technology	Thailand	SIIT Graduate Scholarships
48	TIV Dararith	M	GEE	Master	Sirindhorn International Institute of Technology	Thailand	SIIT Graduate Scholarships
49	TRY Pich	M	GEE	Master	Czech Technical University	Czech	Czech Government Scholarship
50	VE XO Wetu	M	GEE	Master	Sirindhorn International Institute of Technology	Thailand	SIIT Graduate Scholarships
51	CHAN Rathreksmey	M	GGG	Doctorat	Hohai University	China	Hohai
52	CHHORN Tola	F	GGG	Master	Ecole des Mines d'Alès	France	Bourse de Gouvernement Française (BGF)
53	RUN Sreypich	F	GGG	Master	Pohang University of Science and Technology	South Korea	GKS-G Scholarship
54	HENG Visothi	M	GIC	Master	RMIT University	Australia	Self-funded
55	SOMOEURN Virakden	M	GIC	Master	Nankai University / China	China	MOFCOM Scholarship
56	YORN Vanda	M	GIC	Master	Chung-Ang University , South Korea	Korea	CAYSS
57	BUN Sopheapanha	M	GIM	Master	University of Yamanashi	Cambodia	MEXT Scholarship
58	CHEA Sovannarith	M	GIM	Master	Kagoshima University	Japan	Yonemori Scholarship
59	HEM Chanvesna	M	GIM	Master	Sorbonne Paris Nord University	France	BGF
60	HIM Vannthorng	M	GIM	Master	University of Ulsan	Korea	GKS program
61	HORT Sovanvichea	M	GIM	Master	Samara National Research University	Russia	Russian Government Scholarship
62	MOEUN Vicheka	F	GIM	Master	Chulalongkorn University	Thailand	Graduate Scholarship Program for ASEAN & NON-ASEAN Country
63	NEY Pothking	M	GIM	Master	Harbin Institute of Technology	China	CSC Scholarship
64	NOCH Sreyneang	F	GIM	Master	Chulalongkorn University	Thailand	ASEAN or Non-ASEAN Scholarship
65	PHANN Panhaneath	M	GIM	Master	Chulalongkorn University	Thailand	ASEAN & Non-ASEAN program
66	SEK Sereibot	M	GIM	Master	Insa Toulouse University	France	Self-funded

67	SIEB Chanchamnan	M	GIM	Doctorat	Jeonbuk National University	South Korea	Professor's scholarship
68	SOK Phearun	M	GIM	Master	Jeonbuk National University (JBNU)	Korea	Profesor's scholarship
69	SOUS Monypanchakrith	M	GIM	Master	GAZI university	Turkey	YTB
70	TANG Hieb Khor	M	GIM	Master	Khon Kaen University	Thai	Princess scholarship
71	VIRAK Alexander	M	GIM	Master	University Grenoble Alpes	France	Tec21 scholarship
72	VIRAK Somonika	F	GIM	Master	University Grenoble Alpes	France	Self-funded
73	HONG Vouchly	F	GIM-ECAM	Master	Kasetsart University - Sriracha Campus	Thailand	Scholarship
74	LY Pechvattana	M	GIM-ECAM	Master	Kasetsart University - Sriracha Campus	Thailand	Scholarship
75	LY Rady	M	GIM-ECAM	Master	Kasetsart University	Thailand	Scholarship
76	MEY Liza	F	GIM-ECAM	Master	Kasetsart University - Sriracha Campus	Thailand	Scholarship
77	SAN Lihour	M	GIM-ECAM	Master	Kasetsart University	Thailand	Scholarship
78	VAN Sela	M	GIM-ECAM	Master	Kasetsart University	Thailand	Scholarship
79	BAN Liheang	M	GRU	Master	Chulalongkorn University	Thailand	Chulalongkorn University
80	BRANG Sokhorng	M	GRU	Master	Chulalongkorn University	Thailand	Chulalongkorn University
81	CHAN Sameth	M	GRU	Master	Hohai University	China	CSC
82	CHEA Gechhor	F	GRU	Master	Chulalongkorn University	Thailand	ASEAN countries program
83	CHHIM Sophara	M	GRU	Master	Chulalongkorn University	Thailand	ASEAN countries program
84	HOR Vichheka	M	GRU	Master	Hohai University	China	Hohai
85	HOUR Sotheara	M	GRU	Master	Chulalongkorn University	Thailand	ASEAN countries program
86	HUONG Oudomsatia	M	GRU	Doctorat	Kyung Pook National University	Korea	KING scholarship of Kyungpook National University
87	HUOT Boramey	F	GRU	Master	Hohai University	China	Hohai
88	IT Soklin	F	GRU	Master	Chulalongkorn University	Thailand	ASEAN countries program
89	KHE Sotheanea	F	GRU	Master	Chulalongkorn University	Thailand	ASEAN countries program
90	KHIM Sokunthea	F	GRU	Master	Chulalongkorn University	Thailand	ASEAN countries program
91	KHOR Sothyda	F	GRU	Master	Chulalongkorn University	Thailand	Chulalongkorn University

92	KOUN Penglong	M	GRU	Doctorat	Hohai University	China	Hohai
93	KROUK Sothearath	M	GRU	Master	Hohai University	China	Hohai
94	LENG Bovathanak	M	GRU	Master	Chulalongkorn University	Thailand	ASEAN countries program
95	LIM Vonglorng	M	GRU	Master	Hohai University	China	CSC
96	LOK Lyheng	M	GRU	Master	Hohai University	China	Hohai
97	LUN Sambo	M	GRU	Doctorat	Institut Agro Montpellier	France	IRD
98	LY Veasna	M	GRU	Master	Hohai University	China	CSC
99	MEAN Sopheakmony	F	GRU	Master	Hohai University	China	Mekong-Lancang
100	MENG Leangse	F	GRU	Master	Chulalongkorn University	Thailand	ASEAN countries program
101	MOM Attitya	M	GRU	Master	Hohai University	China	Mekong-Lancang
102	NEOM Sophearak	M	GRU	Master	Hohai University	China	CSC
103	NUTH Panha	M	GRU	Master	Chulalongkorn University	Thailand	Chulalongkorn University
104	OL Kimsor	M	GRU	Master	Kyoto University	Japan	MEXT
105	OR Sopheacha	M	GRU	Master	Hohai University	China	CSC
106	PA Visaseka	F	GRU	Master	Hohai University	China	CSC
107	PHAL Sreyluch	F	GRU	Master	Hohai University	China	CSC
108	PHAN Sophanny	F	GRU	Master	Chulalongkorn University	Thailand	ASEAN countries program
109	PHONG Bunthai	M	GRU	Master	Chulalongkorn University	Thailand	ASEAN countries program
110	PHOUTA Belasoviet	M	GRU	Master	Hohai University	China	Hohai
111	PLANG Khimouorn	M	GRU	Master	Chulalongkorn University	Thailand	ASEAN countries program
112	SAM Monyrachana	F	GRU	Master	Hohai University	China	Hohai
113	SEN Sireiwat	M	GRU	Master	Hohai University	China	Hohai
114	SI Chheng Im	F	GRU	Master	Chulalongkorn University	Thailand	ASEAN countries program
115	SOM Bunny	F	GRU	Master	Hohai University	China	Hohai
116	TAUCH Samrethreach	M	GRU	Master	Chulalongkorn University	Thailand	ASEAN countries program
117	TES Davin	M	GRU	Doctorat	Institute of Science Tokyo	Japan	MEXT
118	THA Theb	M	GRU	Master	Institute of Science Tokyo	Japan	MEXT
119	VETH Seavping	F	GRU	Master	Hohai University	China	Hohai
120	YIN Sunny	M	GRU	Master	Chulalongkorn University	Thailand	ASEAN countries program

121	YONG Chhenghor	F	GRU	Master	Hohai University	China	Hohai
122	AUN Chheng Kheang	M	GS	Master	INSA Rennes	France	Erasmus+
123	KORN Sengann	M	GS	Master	Université Toulouse III-Paul Sabatier	France	Erasmus+
124	LEY Satya	M	GS	Master	INSA Rennes	France	Erasmus+
125	MA Song Khun	M	GS	Master	INSA Rennes	France	Erasmus+
126	MONY Rethyden	M	GS	Master	Université de Rennes	France	Erasmus+
127	NAING Bora	M	GS	Master	Institut Polytechnique de Grenoble (Grenoble INP)	France	EDC-AFD-EU
128	OEUN Sothea	M	GS	Master	Institut Polytechnique de Grenoble (Grenoble INP)	France	EDC-AFD-EU
129	POV Ratha	M	GS	Master	Université de Rennes	France	Erasmus+
130	SARY Monychot	M	GS	Master	Institut Polytechnique de Grenoble (Grenoble INP)	France	EDC-AFD-EU
131	SIENG Soleng	M	GS	Master	Université Sorbonne Paris Nord	France	Erasmus+
132	SOK Kungsamreth	M	GS	Master	IMT Mines Alès	France	Eiffel
133	SRY Vanda	M	GS	Master	Institut Polytechnique de Grenoble (Grenoble INP)	France	EDC-AFD-EU
134	SUN Setthika	F	GS	Master	IMT Mines Alès	France	ITC-IMT
135	SUN Soreaksmey	M	GS	Master	Université Toulouse III-Paul Sabatier	France	Erasmus+
136	CHHORM Pahnarith	M	GTR	Master	Sirindhorn International Institute of Technology	Thailand	AI and IoT

Annex 13. Short-term overseas capacity building for lecturers (2024-2025).

No	Nom et prénom	Sexe	Dépt.	Université d'accueil	Titre	Date de mission	Financement
1	Dr. LIN Mongkolserj	M	AMS	UNamur, Belgium	University Visit, Discussion on Partnership, Exchange Program	Feb 24, 2025 -> Mar 07, 2025	ERasmus+
2	Dr. PHAUK Sokkhey	M	AMS	UNamur, Belgium	University Visit, Discussion on Partnership, Exchange Program	Feb 24, 2025 -> Mar 07, 2025	ERasmus+
3	LEU Leanghong	M	GAR	Chiangmai University, Thailand	" Systemic Design for Health " Environmentally Sustainable Healthcare Facilities resilient to Infectious Disease Outbreaks and Natural Hazards	25-08-2024→ 02-09-2025	ITC, Self finance
4	VENH Lay Ou	M	GAR	Chiangmai University, Thailand	" Systemic Design for Health " Environmentally Sustainable Healthcare Facilities resilient to Infectious Disease Outbreaks and Natural Hazards	25-08-2024→ 02-09-2025	ITC, Self finance
5	DOEURN Seyha	F	GCA	Kanazawa University, Japan	Research/Training	27/10/2024 ® 9/11/2024	SATREPS-Air
6	DOEURN Seyha	F	GCA	Nagoya City Institute for Environmental Sciences, Japan	Research/Training	18 ® 23/1/2025	SATREPS-Air
7	Dr. IN Sokneang	F	GCA	Universite Libre de Bruxelles, Belgium	Foolow up mission project ARES-CCD	07-14-June-2025	ARES Institutional Support
8	Dr. IN Sokneang	F	GCA	Ubon Ratchathani University	Food Processing Capacity building Training and Factory Site Visit	7 to 10 May 2025	FTRIP-Capfish project
9	Dr. Phat Chanvorleak	F	GCA	Ubon Ratchathani University	Food Processing Capacity building Training and Factory Site Visit	7 to 10 May 2025	FTRIP-Capfish project
10	Dr. TAN Reasmey	F	GCA	Universite Libre de Bruxelles, Belgium	Training on Communication	07-22 June, 2025	ARES Institutional Support
11	Dr. Yin Molika	F	GCA	Universite Libre de Bruxelles, Belgium	Training on Communication	07-22 June, 2025	ARES Institutional Support

12	EK Pichmony	F	GCA	University of Liege, Belgium	Mentorship Program in Food Processing	23/11/2024 ® 1/12/2024	ARES Institutional Support
13	HOEURN Seanghai	F	GCA	Indonesia	Project kick off meeting	30/9/2024 ® 4/10/2024	SEARUFF project
14	IN Sokneang	F	GCA	Indonesia	Project kick off meeting	30/9/2024 ® 4/10/2024	SEARUFF project
15	IN Sokneang	F	GCA	UNIDO headquarter, Vienna, Austria	Vienna Sustainable Food Packaging ConFex conference	9 ® 11/10/2024	Capfish-Project
16	PENG Chanthol	F	GCA	Kanazawa University	Research/Training	27/10/2024 ® 9/11/2024	SATREPS-Air
17	SROY Sengly	F	GCA	L'Institute Agro Montpellier	Training on sensory evaluation of dried fish powder	3 ® 13/5/2024	PHC Tonle Sap Project
18	SUONG Malyna	F	GCA	Institut de Recherche pour le Développement (IRD)	Project closure	12 ® 21/10/2024	Plant Health Project
19	TAN Reasmey	F	GCA	Northern Crops Institute, North Dakota USA	NCI INTSOY Short Course	12 ® 16 /08/2024	American Soybean Association
20	TAN Reasmey	F	GCA	University of Liege, Belgium	Mentorship Program on Food Processing	23/11/24 ® 1/12/2024	ARES Institutional Support
21	Dr. HENG Sounean	F	GCI	INSA de Rennes	Eramus+ Staff Mobility	28-11-2024→ 07-01-2025	Erasmus+ Program
22	HAN Virak	M	GCI	Université de Liège	Project Amorce d'amélioration de produits routières	25/8/2024 → 1/9/2024	ARES-Amorce
23	HAN Virak	M	GCI	Techtich University Lubeck	Project ReBuMat	1 → 8/9/2024	ARES-Amorce
24	Han Virak	M	GCI	University Technique of Cluj-Napoca	Staff Exchange ERASMUS+	16-02 to 23-02-2025	Erasmus+
25	Han Virak	M	GCI	ASEAN-QA Secretariat, University of Potsdam	TrainIQA ASEAN-QA Opening Conference	19-march to 21 march 2025	Federal Ministry for Economic Cooperation and Development (BMZ), Germany

26	Han Virak	M	GCI	INSA de Rennes	Staff mobility	09-06-205 to 18-06-2025	ERASMUS+
27	KAN Kuchvichea	M	GCI	Université de Liège	Project Amorce d'amélioration de produits routières	25/8/2024 → 1/9/2024	ARES-Amorce
28	LIM Sovanvichet	M	GCI	Université Rennes	Training mobility	27/1/2025 → 8/2/2025	Erasmus
29	Am Sokchea	M	GEE	Université de Namur	Join Master and PhD co-supervision topics and future collaboration	12/5/2025→17/05/2025	ARES-AI
30	CHRIN Phok	M	GEE	Université de Namur	Project Amorce d'amélioration de produits routières	12/5/2025→17/05/2025	ARES-AI
31	OENG Kechki	F	GEE	Fukui University	Sakura Science visiting	8/9/2024 → 14/9/2024	<u>Sakura Science Exchange Program</u>
32	SUM Rithea	M	GEE	Fukui University	Sakura Science visiting	8/9/2024 → 14/9/2024	<u>Sakura Science Exchange Program</u>
33	VAI Vannak	M	GEE	Washington State University (WSU)	U.S.-ASEAN Visiting Scholar	1/1/2025 → 30/4/2025	<u>Fulbright U.S.-ASEAN Visiting Scholar Initiative – FY 2025</u>
34	ENG Chandoeun	M	GGG	Gadjah Mada University	Attending International conference and Collaboration discussion	11 → 17/9/2024	Slef-Financial
35	KAING Sainglong	M	GGG				
36	BOU Channa	M	GIC	Singapore Science Center / Singapore	A study visit to Singapore Science Center	May 7, 2024 -> May 11, 2024	STEP UP project
37	CHOM Sreylam	M	GIC	National University of Laos, Lao	DXSEA ToT	4/11/2024@8/11/2024	Erasmust+ DXSEA
38	HOK Tin	M	GIC	Korea Advanced Institute of Science & Technology (KAIST), South Korea	ANLab research visit	08/09/2024 → 05/10/2024	KAIST Professor

39	KUY Movsun	M	GIC	Dublin City University, Ireland	Ireland-Cambodia Exchange Program	May 11, 2025 -> May 16, 2027	Embassy of Ireland
40	KUY Movsun	M	GIC	UNamur, Belgium	Research Presentation	Mar 25, 2025 -> Mar 28, 2025	UNamur research budget
41	LAY Heng	M	GIC	Instituto Superior Técnico	DX.SEA project meeting	18 → 25/02/2025	Erasmust+ DXSEA
42	PICH Reatrey	M	GIC	Osaka Japan	The 12th International Conference on Network, Communication and Computing	Dec 14, 2023 -> Dec 21, 2023	Self-funded
43	SEAK Leng	F	GIC	National University of Laos, Lao	DXSEA ToT	04 → 08/11/2024	Erasmust+ DXSEA
44	VALY Dona	M	GIC	Instituto Superior Técnico	DX.SEA project meeting	19 → 23/02/2024	Erasmust+ DXSEA
45	VALY Dona	M	GIC	National University of Laos, Lao	DXSEA ToT	04 → 08/11/2024	Erasmust+ DXSEA
46	VALY Dona	M	GIC	Dublin City University, Ireland	Ireland-Cambodia Exchange Program	May 11, 2025 -> May 16, 2026	Embassy of Ireland
47	CHAN Sarin	M	GIM	ESCAP, Thailand	Promoting Passive Cooling Strategies in Building Sector Policy and Practice	15 → 16/08/2025	ESCAP
48	CHAN Sarin	M	GIM	Can Tho University	Environmental Monitoring Workshop in Can Tho University, Vietnam	14-15/05/2025	Water Sensitive Cities Australia
49	CHAN Sarin	M	GIM	Singapore Battery Consortium (SBC), Agency for Science	THE 2nd MEETING OF THE ASEAN BATTERY SAFETY NETWORK (ABSN) MEETING	24-25/05/2025	UL Standards & Engagement
50	CHHIT Saosometh	M	GIM	Paris Sorbonne Paris Nord University	Eramus +KA171 staff mobility between ITC and Paris Sorbonne Paris Nord University	01-15/03/2025	Eramus

51	CHHIT Saosometh	M	GIM	Paris Sorbonne Paris Nord Univeristy	Eramus +KA171 staff mobility between ITC and Paris Sorbonne Paris Nord University	01-15/03/2025	Eramus
52	HEANG Latin	M	GIM	Thailand Insitute of Science and Technologies Research (TISTR)	Renewable Energy Technologies and Knowledge Transfer for Strengthening and Achieving ASEAN's Sustainable Development Goals	20/01/2025 → 07/02/2025	Thailand International Cooperation Agency (TICA)
53	HEANG Latin	M	GIM	ZHEJIANG UNIVERSITY, China	Training	27/10/2024 → 10/11/2024	ZHEJIANG UNIVERSITY
54	LY Soheng	M	GIM	Thailand Insitute of Science and Technologies Research (TISTR)	Renewable Technologies and Knowledge Transfer	20/01/2024 → 07/02/2025	Thailand International Cooperation Agency (TICA)
55	PHUOY Lyheng	M	GIM	ITE, Singapore	Makerspace training workshop	9 → 13/12/2024	ADB (S4C program)
56	SRV Vannei	M	GIM	Korean Agency for Technology and Standards (KATS)	Cooperation on standards area between Korea and ASEAN	26 → 29/11/2024	Korean Agency for Technology and Standards
57	SRV Vannei	M	GIM	Paris Sorbonne Paris Nord Univeristy	Eramus +KA171 staff mobility between ITC and Paris Sorbonne Paris Nord University	01-15/03/2025	Eramus
58	VONGCHANH Kinnalesh	F	GIM	National University of Laos	Lab Base Education Implementation	24 → 24/09/2024	Self-funded
59	VONGCHANH Kinnalesh	F	GIM	National University of Singapore	1st GHHIN Southeast Asia Heat Health Forum	7 → 10/01/2025	1st GHHIN Southeast Asia Heat Health Forum
60	VONGCHANH Kinnalesh	F	GIM	ESCAP, Thailand	PROMOTING PASSIVE COOLING STRATEGIES IN BUILDING SECTOR POLICY AND PRACTICE	15 → 16/08/2024	ESCAP
61	BUN Saret	M	GRU	Ministry of Natrual Resources and Environment, Lao PDR	The ASEAN Conference on Combatting Plastic Pollution: Innovation and Partnership to Plastic Pollution	28 ® 29/10/2024	UNDP-Cambodia

62	BUN Saret	M	GRU	Stockholm Environment Institute (SEI) Asia Centre, Thailand	Mekong Environmental Resilience Week 2024	7 ® 10/10/2024	SEI Asia
63	CHHUON Kong	M	GRU	FAO and Ministry of Agriculture and Cooperatives, the Royal Thai Government	International Soil and Water Forum	9 ® 11/12/2024	FAO
64	CHHUON Kong	M	GRU	MRC	Regional training of trainers on the water quality monitoring under the mrc core river monitoring network	9 ® 13/9/2024	GIZ
65	CHHUON Kong	M	GRU	Center for Southeast Asian Studies (CSEAS) and Universiti Malaya (UM)	Regional Policy Dialogue on Circular Economy and Plastic Waste Management in ASEAN	5 ® 6-2/2025	Norwegian Institute for Water Research
66	CHORK Vuthy	M	GRU	Chulalongkorn University	2nd Southeast Asia Environmental Systems (SEAES) Regional Workshop	17→21/06/2026	SEAES2025 Workshop
67	DOUNG Ratha	M	GRU	Chulalongkorn University	2nd Southeast Asia Environmental Systems (SEAES) Regional Workshop	17→21/06/2025	SEAES2025 Workshop
68	Dr. MUON Ratha	F	GRU	Soils and Fertilizers Research Institute, Vietnam	Participate to the regional workshop on “Soil organic matter, Sustainable Land Management & Climate Mitigation in Southeast Asia. A diversity of situations for a diversity of solutions”	May 22 ->23, 2025	European Union ORCaSa project.
69	Eang Khy Eam	M	GRU	Mekong Institute	SGMekong-ROK Project	24→27/02/2025	Mekong Institute (MI)
70	Eang Khy Eam	M	GRU	Melia Hotel, Hanoi	SGMekong-ROK Project	13→15/05/2025	SGMekong-ROK Project
71	Eang Khy Eam	M	GRU	Mekong Institute	SGMekong-ROK Project	9→13/06/2025	Mekong Institute (MI)
72	Eang Khy Eam	M	GRU	Chulalongkorn University	IRD	17→20/06/2025	INVERSAP Project
73	Eang Khy Eam	M	GRU	Mekong Institute (MI)	Regional Project Identification Training	24→27/02/2025	Mekong-ROK Cooperation Fund (MKCF)

74	Eang Khy Eam	M	GRU	Melia Hotel, Hanoi (organized by MKCF)	Mekong-ROK Cooperation Forum: Advancing Regional Development and Partnerships	13→15/05/2025	SGMekong-ROK Project
75	Eang Khy Eam	M	GRU	Institute of Urban Agriculture, Chinese Academy of Agricultural Science	The 3rd “Belt and Road” Countries’ Mountain Agriculture and Intelligent Equipment Science and Technology Development Forum	25→27/05/2025	Lancang-Mekong Agricultural Cooperation Project
76	Eang Khy Eam	M	GRU	Mekong Institute (MI)	Modular Training Program on “Regional Project Monitoring and Evaluation	8→14/06/2025	Mekong-ROK Cooperation Fund (MKCF)
77	Eang Khy Eam	M	GRU	Chulalongkorn University	2nd Southeast Asia Environmental Systems (SEAES) Regional Workshop	17→21/06/2025	INVERSAP Project, IRD
78	HENG Sokchhay	M	GRU	FAO and Ministry of Agriculture and Cooperatives, the Royal Thai Government	International Soil and Water Forum	9 → 11/12/2024	FAO
79	HENG Sokchhay	M	GRU	University of Chicago’s Francis and Rose Yuen Campus in Hong Kong	From the Countryside to the City: Environmental Transformations and the Impact of Urbanization, Land Use Changes, and Migration on Cambodian Life	22/5/2025→24/05/2025	Neubauer Collegium, Committee on Environment, Geography, and Urbanization, UChicago Global and the Department of Anthropology
80	LUN Sambo	M	GRU	Chulalongkorn University	2nd Southeast Asia Environmental Systems (SEAES) Regional Workshop	17→21/06/2028	SEAES2025 Workshop
81	MUON Ratha	F	GRU	IRD in Bondy and Marseille	To analyze the samples in the lab in Bondy, and participate to Trophées de l'innovation 2024 (and the phrase 2 coaching of the Trophées de l'innovation) in Marseille	30/8/2024 → 12/10/2024	IRD

82	PEN Sytharith	M	GRU	Chulalongkorn University	2nd Southeast Asia Environmental Systems (SEAES) Regional Workshop	17→21/06/2027	SEAES2025 Workshop
83	SANG Davin	F	GRU	Flinders University, South Australia	Unlocking Mekong Region's Hidden Groundwater Potential through Collaboratin and Capacity Building (Mekong)	11 → 29/11/2024	Australia Government (DFAT)
84	SAO Sochan	F	GRU	Kanazawa University, Japa	Short training on air quality monitoring (Data analysis and Particulate matter monitoring)	26/10/2024→10/11/2024	JICA
85	SAO Sochan	F	GRU	Soils and Fertilizers Institute, Vietnam	Soil organic matter and CO2 training and analysis	1→15/12/2024	IRD
86	SAO Sochan	F	GRU	JICA office in Nagoya, Japan	Short training on air quality monitoring (Chemical analysis)	18 → 28/1/2025	JICA
87	SAO Sochan	F	GRU	University of Science, Vietnam National University, Hanoi (VNU-US)	ECOTERM Project	06/05/2025→17/05/2025	IRD
88	SONG Layheang	M	GRU	Korea International Water Week (KIWW), Korea	2024 Korea International Water Week (KIWW) Technology, Implementation, Policy (TIP) Platform Session	13 → 15/11/2024	K-Water
89	SONG Layheang	M	GRU	IRD in Laos	Comité de Pilotage Stratégique et Scientifique	17 → 20/11/2024	IRD
90	SONG Layheang	M	GRU	KOMEK, Korea	Structured Learning Visit on Exploring Best Practices for Water Resources Management in Korea	24 → 30/11/2024	K-Water
91	SONG Layheang	M	GRU	Japan International Research Center for Agricultural Sciences (JIRCAS), Japan	RiceGX-SATREPS project	01/06/2025→13/06/2025	JICA
92	THENG Vouchlay	F	GRU	World Bank, Vietnam	Inception Workshop and Exchange Visit in Viet Nam Options for conserving and restoring forests to mitigate floods and improve water services	9 → 13/12/2024	World Bank

93	THENG Vouchlay	F	GRU	UNDP-Indonesia	ASEAN Blue Innovation Challenge Expo and Business Matching	17 ® 21/2/2025	UNDP-Indonesia
94	EK Pichmony	F	GS	University of Alicante, Spain	Cambodian Higher Education Advancing in Internationalization (CHAIN)	10/6/2024 ® 20/6/2024	Erasmus+ Program
95	EK Pichmony	F	GS	Asian Institute of Technology, Thailand	Smart Cities ASEAN Learning Network (SCALE)	15 ® 17/7/2024	Erasmus+ Program
96	HIN Raveth	M	GS	Université de Liège	Formation pédagogique	17/9/2024 → 5/10/2024	ARES-AI 2022-2027
97	KHON Kimsrornn	M	GS	Université Grenoble Alpes	Platform for Research and Training on the Power System	23 → 29/9/2024	AFD-EU
98	KHON Kimsrornn	M	GS	Fulbright University Vietnam	YSEALI Academy Public Policy Seminar	18 → 22/11/2024	YSEALI Fulbright 2024
99	SIM Tepmony	M	GS	University of Thessaly, Greece	Smart Cities ASEAN Learning Network (SCALE)	17 ® 21/4/2025	Erasmus+ Program
100	PHUN Vengkheang	M	GTI	University of South California	US-ASEAN Smart Mobility Program	12 → 20/9/2024	US DOT
101	PHUN Vengkheang	M	GTI	Toronto Metropolitan University (TMU)	MOU discussion and signature between ITC and TMU	10 → 25/10/2024	US DOT
102	Phun Vengkheang	M	GTI	Université de Liège	Technical visit	09-03-2025 to 12-04-2025	ARES Amorce
103	YANG Panha	F	GTI	Université de Liège	Project Amorce d'amélioration de produits routières	27/8/2024→3/10/2024	ARES-Amorce
104	HEL Chanthan	M	GTR	Chitose Institute of Science and Technology, Japan	Sakura Science Exchange Program	13 ®20/2/2025	Sakura Science Exchange Program
105	KEAN Jeudy	M	GTR	Chitose Institute of Science and Technology, Japan	Sakura Science Exchange Program	13 ®20/2/2025	Sakura Science Exchange Program
106	SOK Kimhuy	M	RIC	Chulalongkorn University	2nd Southeast Asia Environmental Systems (SEAES) Regional Workshop	17→21/06/2025	SEAES2025 Workshop

Annex 14. Short-term overseas capacity building for students (2024-2025).

No	Nom et prénom	Sexe	Dépt.	Université d'accueil	Pays	Titre	Date de mission	Financement
1	MOT Teng	M	GEE	Fukui University	Japon	Sakura Science visiting	10-9-2024 → 14-9-2024	Sakura Science Exchange Program
2	CHAB SREYLEN	M	GIC	Daegu Gyeongbuk Institute of Science & Technology	Corée	Internship	26-6-2024 → 26-7-2024	DGIST
3	CHAN Borivann	M	GCI	Tekoma Energy ,Inc.	Japan	Internship Program	07-April-2025 → 07-Sep-2025	Company financial support
4	CHEA Sopheak	M	GRU	Asian Institute of Technology (AIT)	Thailand	Internship program	27-04-2025 → 27-06-2025	AIT
5	CHENG Chheangkang	M	GEE	Silpakorn University	Thailand	Cultural & Engineering Skills Exchange Program	19-05-2025 → 22-05-2025	Silpakorn University
6	CHHEANG Seavpao	M	GS	INSA Rennes	France	Internship	28-1-2025 → 30-6-2025	Erasmus+
7	CHHEANG Sreykhouch	F	GGG	Kyushu University	Japon	Internship and International Symposium	22-11-2024 → 8-12-2024	JASSO Scholarship
8	CHHUON Sreylea	F	GTI	ALTHOS Parners Japan Co., LTD	Japan	Internship program	10-02-2025 to 10-05-2025	Company financial support
9	CHIN Kav	M	GGG	Kanazawa University	Japon	Sakura Science Program	25-8-2024 → 31-8-2024	<u>Sakura Science Exchange Program</u>
10	CHIN Kav	M	GGG	Kyushu University	Japon	Internship and International Symposium	22-11-2024 → 8-12-2024	JASSO Scholarship
11	CHONG Sanu	M	GCI	Sato Kogyo Company	Japan	Internship program	17-feb-2025 → 20 may 2025	Company financial support

12	CHORN Lathea	F	GEE	Silpakorn University	Thailand	Cultural & Engineering Skills Exchange Program	19-05-2025 → 22-05-2025	Silpakorn University
13	DOEM Chomrung	M	GRU	Institute of Urban Agriculture	Chine	Internship program	1-7-2024 → 30-10-2024	Chinese Academy of Agricultural Sciences
14	EL Danin	M	GIM	ECAM LaSalle	France	One semester exchange	23-9-2024 → 24-01-2025	Support by ECAM LaSalle
15	EM Hengly	F	GIC	UMONS	Belgique	Internship	8-4-2024 → 1-7-2024	ARES
16	EN Chanthorn	F	GTI	ALTHOS Parners Japan Co., LTD	Japan	Internship program	10-02-2025 to 10-05-2025	Company financial support
17	HAN Malin	F	GS	Grenoble INP-UGA (Université Grenoble Alpes)	France	Internship	1-3-2025 → 31-8-2025	EDC-AFD-EU
18	HENG Chanmonida	F	GRU	King Mongkut's University of Technology Thonburi (KMUTT)	Thailande	Asian International Mobility for Students (AIMS) Programme	28-7-2024 → 20-12-2024	MoEYS of Cambodia
19	Hok Sochetra	M	GIC	Denso	Thailande	Internship	27-1-2025 → 7-3-2025	Denso
20	HONG Nitmonika	F	GIM	ECAM LaSalle	France	One semester exchange	23-9-2024 → 24-01-2025	Support by ECAM LaSalle
21	HOR Seyha	M	GCI	Sato Kogyo Company	Japan	Internship program	17-feb-2025 → 20 may 2025	Company financial support
22	HORN Makara	M	GEE	Silpakorn University	Thailand	Cultural & Engineering Skills Exchange Program	19-05-2025 → 22-05-2025	Silpakorn University
23	KHY Punnreay	M	GIC	National Chung Cheng University	Taiwan	Internship	26-2-2024 → 28-6-2024	National Chung Cheng University

24	KIM Sokpiseth	M	GCI	Sato Kogyo Company	Japan	Internship program	17-feb-2025 → 20 may 2025	Company financial support
25	KRY Sokleap	F	GRU	University of Yamanashi	Japon	International Water Research Exchange Program	20-8-2024 → 28-8-2024	Sakura Science Exchange Program
26	LAY Chaing Zeu	M	GIM	ECAM LaSalle	France	One semester exchange	23-9-2024 → 24-01-2025	Support by ECAM LaSalle
27	LEACH Chanvisarna	F	GRU	Institute of Urban Agriculture	Chine	Internship program	1-7-2024 → 30-10-2024	Chinese Academy of Agricultural Sciences
28	LEANG Sreymuy	F	GTI	ALTHOS Parners Japan Co., LTD	Japan	Internship program	10-02-2025 to 10-05-2025	Company financial support
29	LIM Monika	F	GRU	Institute of Urban Agriculture	Chine	Internship program	1-7-2024 → 30-10-2024	Chinese Academy of Agricultural Sciences
30	LY Sokpanha	M	GEE	Silpakorn University	Thailand	Cultural & Engineering Skills Exchange Program	19-05-2025 → 22-05-2025	Silpakorn University
31	LY Teachkeang	F	GEE	Silpakorn University	Thailand	Cultural & Engineering Skills Exchange Program	19-05-2025 → 22-05-2025	Silpakorn University
32	LY Virak	M	GEE	Silpakorn University	Thailand	Cultural & Engineering Skills Exchange Program	19-05-2025 → 22-05-2025	Silpakorn University
33	LYNA Sovandaroth	M	GEE	Silpakorn University	Thailand	Cultural & Engineering Skills Exchange Program	19-05-2025 → 22-05-2025	Silpakorn University
34	MA Sophal	M	GEE	Silpakorn University	Thailand	Cultural & Engineering Skills Exchange Program	19-05-2025 → 22-05-2025	Silpakorn University

35	MEACH Rachana	F	GRU	Institute of Urban Agriculture	Chine	Internship program	1-7-2024 → 30-10-2024	Chinese Academy of Agricultural Sciences
36	MEACH Vibolreach	M	GGG	Kyushu University	Japon	Internship and International Symposium	22-11-2024 → 8-12-2024	JASSO Scholarship
37	MEAS Samrith	M	GS	INSA Rennes	France	Internship	28-1-2025 → 30-6-2025	Erasmus+
38	MOM Sopanha	M	GTI	ALTHOS Parners Japan Co., LTD	Japan	Internship program	10-02-2025 to 10-05-2025	Company financial support
39	NEAN Sreynin	F	GEE	Silpakorn University	Thailand	Cultural & Engineering Skills Exchange Program	19-05-2025 → 22-05-2025	Silpakorn University
40	NGOUN Kimly	F	GEE	Fukui University	Japon	Sakura Science visiting	8-9-2024 → 14-9-2024	<u>Sakura Science Exchange Program</u>
41	NGUON Hoeunsovandara	M	GCI	Sato Kogyo Company	Japan	Internship program	17-feb-2025 → 20 may 2025	Company financial support
42	NI Sokmeng	M	GGG	Kyushu University	Japon	Internship and International Symposium	22-11-2024 → 8-12-2024	JASSO Scholarship
43	OEUN Monioudom	M	GS	Grenoble INP-UGA (Université Grenoble Alpes)	France	Internship	1-3-2025 → 31-8-2025	EDC-AFD-EU
44	OL Somphors	F	GRU	University of Yamanashi	Japon	International Water Research Exchange Program	20-8-2024 → 28-8-2024	Sakura Science Exchange Program
45	PAK Sori	M	GTR	Chitose Institute of Science and Technology	Japon	Sakura Science Exchange Program	13-2-2025 → 20-2-2025	<u>Sakura Science Exchange Program</u>
46	PHLOUCH Ravin	M	GTI	ALTHOS Parners Japan Co., LTD	Japan	Internship program	10-02-2025 to 10-05-2025	Company financial support
47	PONLEU Chansokret	M	GTI	ALTHOS Parners Japan Co., LTD	Japan	Internship program	10-02-2025 to 10-05-2025	Company financial support
48	RONG Phary	F	GGG	Kyushu University	Japon	Internship and International Symposium	22-11-2024 → 8-12-2024	JASSO Scholarship
49	Sam Khema	M	GIC	Chung Cheng University,	Taiwan	Internship	3/4/2024 - 6/27/2024	National Chung Cheng University

50	SAMAI Sany	F	GRU	University of Yamanashi	Japon	International Water Research Exchange Program	20-8-2024 → 28-8-2024	<u>Sakura Science Exchange Program</u>
51	SAY Ksattrra	M	GEE	Silpakorn University	Thailand	Cultural & Engineering Skills Exchange Program	19-05-2025 → 22-05-2025	Silpakorn University
52	SEAB Chhunly	M	GTI	ALTHOS Parners Japan Co., LTD	Japan	Internship program	10-02-2025 to 10-05-2025	Company financial support
53	SEANG Vanaeth	F	GRU	Institute of Urban Agriculture	Chine	Internship program	1-7-2024 → 30-10-2024	Chinese Academy of Agricultural Sciences
54	SIM Sokhuy	M	GIM	ECAM LaSalle	France	One semester exchange	23-9-2024 → 24-01-2025	Support by ECAM LaSalle
55	SOK Khangor	M	GCI	INSA de Rennes	France	Exchange	01-Sep-2024 → 30-Jan-2025	Self-funded
56	SOK Senglay	M	GCI	INSA de Toulouse	France	Exchange	01-Sep-2024 → 30-Jan-2025	Self-funded
57	SOM Sopha	F	GTI	ALTHOS Parners Japan Co., LTD	Japan	Internship program	10-02-2025 to 10-05-2025	Company financial support
58	SONG Selasak	M	GIC	Université de Namur	Belgique	Internship	4-4-2024 → 4-7-2024	Erasmus+ International Credit Mobility
59	SOR Sockheang	M	GTI	ALTHOS Parners Japan Co., LTD	Japan	Internship program	10-02-2025 to 10-05-2025	Company financial support
60	SRONG Ougy	M	GIM	ECAM LaSalle	France	One semester exchange	23-9-2024 → 24-01-2025	Support by ECAM LaSalle
61	SVAY Monineath	F	GS	INSA Rennes	France	Internship	28-1-2025 → 30-6-2025	Erasmus+
62	THY Oumny	F	GTI	ALTHOS Parners Japan Co., LTD	Japan	Internship program	10-02-2025 to 10-05-2025	Company financial support
63	TIV Dararith	M	GEE	Fukui University	Japon	Sakura Science visiting	9-9-2024 → 14-9-2024	Sakura Science Exchange Program
64	VEASNA Dara	M	GIC	Danang	Vietnam	Training on Web3	26-9-2024 → 29/9/2024	Self-funded
65	YEN Oudom		GIC	Université de Namur	Belgique	Internship	7-4-2024 → 7-7-2024	Erasmus+ International Credit Mobility

Annex 15. Dispatch Professor at ITC (2024-2025).

No		Nom et prénom	Université d'origine	Matière enseignée	Date	Départ. d'accueil
1	M.	Andrew Ogilvie	France	Surface water monitoring and modelling	18-05-2025 → 28-05-2025	GRU
2	M.	B. Tuna KAYAALP	Eskisehir Technical University	Asphalt Pavements	26-05-2025 to 31-06-2025	GTI
3	M.	Bertrand Francois	Belgium	Geotechnical Engineering	27-1-2025 to 31-1-2025	GTI
4	M.	Bertrand RAISON	Université Grenoble Alpes	Electrical Power System	10-12-2024 → 15-12-24	GS
5	M.	Bill Young	Australia	Water Scarcity	15-01-2025	GRU
6	M.	Bill Young	Australia	Water Scarcity	16-05-2025 → 23-05-2025	GRU
7	M.	Christophe BOBINEAU	Université Grenoble Alpes	Introduction of the application of the IT in the smart grid	05-11-2025	GS
8	M.	Engr. Arnaldo C. Gagula	Caraga State University, Philippines	Remote Sensing	17-12-2024	GGG
9	M.	Kazuyuki Takahashi	Yonemori Construction	Recrutement des étudiants	06-02-2025	GCI
10	M.	Kazuyuki Takahashi	Yonemori Construction	Scientific day	05-06-2025 to 08-06-2025	GCI
11	M.	Keh-Jian Shou	National Chung-hsing University, Taiwan	Landslide Hazard with the Impact of Climate Change	04-07-2024	GGG
12	M.	Kimnengh TAING	Université de Liège	Ingénierie architecturale	11-01-2025 → 15-01-2025	GAR
13	M.	Kitaka Junne	Kagoshima University	Scientific day	05-06-2025 to 08-06-2025	GCI
14	M.	Kokichi Miyagishi	Sato Kogyo HQ	Stage de I5	18-03-2025	GCI
15	M.	Luc Courard	Université de Liège	Circularité des matériaux (Projet ASEM-DUO)	04-06-2025 to 10-06-2025	GS
16	M.	Makara Long	Université de Liège	Ingénierie architecturale	11-01-2025 → 15-01-2025	GAR
17	Mme	Melissa Lenczewski	USA	Mircoplastic Pollution	20-05-2025 → 25-05-2025	GRU

18	M.	Naoki Yonemori	Yonemori Construction	Recrutement des étudiants	06-02-2025	GCI
19	M.	Nichole Anthony D. Pacle	Caraga State University, Philippines	GIS	17-12-2024	GGG
20	M.	Osawa Yuji	Sato Kogyo HQ	Stage de I5	18-03-2025	GCI
21	M.	Pascal Jouquet	France	Soil Science	01-05-2022 → 31-08-2026	GRU
22	M.	Paul Baudron	France	Hydro-geochemistry	01-09-2023 → 31-07-2025	GRU
23	M.	Pierre Gerard	Belgium	Construction, Architecture, and Urbanization	27-1-2025 to 31-1-2025	GTI
24	M.	Pierre Leclercq	Université de Liège	Architecture	11-01-2025 → 15-01-2025	GAR
25	M.	Robin Hublart	ARES	Architecture	11-01-2025 → 15-01-2025	GAR
26	Mme	Sabine Goulin	Université Grenoble Alpes	Analyse des Risques (Projet AUF)	26-05-2025 to 30-05-2025	GS
27	Mme	Samia Rajeb Ben	Université Libre de Bruxelles	Architecture	11-01-2025 → 15-01-2025	GAR
28	M.	Shahab Yasrebi	Geomaple Geotechnics Inc., Canada	Innovative Urban Tunnelling and Deep Excavation Techniques	22-11-2024	GGG
29	M.	Shin Kato	Japan	Water Supply	26-12-2024	GRU
30	M.	Sylvain Massuel	France	Hydrogeology	19-02-2025 → 05-03-2025	GRU
31	M.	Tharakan Joseph	Belgium	Economy Analysis and Policy	27-1-2025 to 31-1-2025	GTI
32	M.	Theany TO	Université de Rennes	Molecular Dynamics Simulations (Erasmus +) + Scientific day	02-06-2025 to 13-05-2025	GCI
33	M.	Thierry Bontemp	Université Grenoble Alpes	Analyse des Risques (Projet AUF)	26-05-2025 to 30-05-2025	GS
34	M.	Toshinobu YAMAGUCHI	Kagoshima University	Scientific day	05-06-2025 to 08-06-2025	GCI

Annex 16. Detail information on research vision, mission, research interests of ETM Unit.

Cambodian Context

Cambodia has sustained an impressive average annual economic growth. To ensure enduring and inclusive growth, the nation has embarked on a path to promote industrial development, aiming to foster economic diversification, bolster competitiveness, and enhance productivity. Consequently, there has been a notable surge in energy demand and consumption.

In pursuit of sustainable development, ensuring energy security holds paramount importance, necessitating the expansion of energy sector infrastructure and the development of human resources to keep pace with socio-economic progress. The Rectangular Strategy-Phase IV has underscored one of the lingering challenges in diversification and value creation in the industry and service sectors: high energy prices (electricity rates) compared to neighbouring countries.

However, the landscape is evolving. Until recently, the cost of renewable energy has witnessed a remarkable decline, particularly in solar photovoltaic and onshore wind energy technologies. Expanding the share of renewables in Cambodia's energy mix, alongside diversification and utilization of locally available resources, and the adoption of energy efficiency and conservation measures, will be pivotal for the advancement of the energy sector in the country. In this context, innovations in the energy sector, including solar and wind energy, alongside initiatives like turning waste into warmth and energy efficiency enhancements in distribution systems through the integration of energy management systems and trading, conventional oil, gas and rare earth element exploration, present promising avenues for sustainable development and economic growth.

The Research Unit

The research unit, specializing in energy technology and energy management, boasts internationally recognized expertise in specific fields relevant to Cambodian requirements. This expertise contributes significantly to the exploration of conventional energy resources, as well as the advancement of new and renewable energy sources and energy efficiency and conservation efforts. This is achieved through extensive research, collaborations with international partners, private sectors, and pertinent government agencies, and the cultivation of skilled human resources.

The areas of research and collaboration prioritized by the unit encompass a wide range of topics, including but not limited to biomass and agricultural waste conversion for energy production, solar photovoltaic and thermal energy systems, wind energy technologies, innovative smart grid solutions, micro-grid development for remote areas, energy consumption measurement and analysis methodologies, energy management systems, simulation of large-scale energy systems, and exploration of conventional energy resources.

Vision

To be leading contributor in supporting national energy security through research and innovation, knowledge creation and technology transfer with focus on energy sources diversification, efficient use of energy and environmental friendliness.

Mission

- Producing competent human resources in energy related fields.

- Conducting research in new and renewable energy, energy conversion and recovery, energy conservation, saving and management, and exploration of conventional energy resources to address local and regional issues.
- Closely collaborating with related Ministries, national and international partners and private sectors.
- Disseminate research findings and transfer technologies to the society

Research Themes

The multidisciplinary team addresses scientific issues in the following sectors:

- New and Renewable Energy: Biomass, Solar PV, Solar PV/T, and Wind Turbine with a focus on design and modelling of processes, fuel and emissions measurements, lab and pilot scale equipment.
- Energy Efficiency and Conservation: Heat recovery, Waste to energy, thermal systems optimization, energy consumption measurement and modelling.
- Smart grid: connexion from renewable sources and optimization of grid electricity distribution and micro-grid for remote areas.
- Energy Management: energy management system, modelling and optimization of large energy systems.

Exploration of conventional energy resources: depositional environment and reservoir characterization, mapping of hydrothermal alteration related base metal deposits, geological mapping and investigation of hydrocarbon potential.

Researchers

Senior researchers (11M, 2F)

Dr. KRET Kakda, (Head of ETM Research Unit), Ph.D in Geophysics, Kyushu University, Japan
Geophysical exploration (seismic, magnetic, electrical and resistivity methods), Oil and Gas Exploration, remote sensing and GIS, economic geology.

Dr. OR Chanmoly (Director of RIC), Ph.D. in Petroleum Production Engineering, Kyushu University, Japan
Enhanced oil recovery; reservoir engineering; CO₂ sequestration; biomass to energy

Dr. CHAN Sarin (Head of Industrial and Mechanical Engineering Department), Ph.D. in Engineering, Institute of Technology Bandung, Indonesia and Keio University, Japan
Renewable energy, waste heat recovery and heat-activated cooling system

Dr. AM Sokchea, Ph.D in Energy Engineering, France
Energy Power System

Dr. BUN Long, Ph.D. in Electrical Engineering, INP Grenoble, France
Power system, renewable energy system, fault diagnosis

Dr. CHRIN Phok, Ph.D. in Electrical Engineering, Université Paul Sabatier, Toulouse, France
Renewable energy, frugal engineering, asynchronous generator

Dr. VAI Vannak, Ph.D. in Electrical Engineering, Université Grenoble Alpes, France
Power distribution system planning, Rural electrification, Optimization

Dr. KIM Bunthern, Ph.D in Electrical and Electronics Engineering, Toulouse INP, France
Control systems, Renewable energy, Robotics

Dr. ENG Chandoeun (Head of Faculty of Geo-resources and Geotechnical Engineering), Ph.D. in Geophysics, Kyushu University, Japan
Geophysical exploration, Economic geology, Oil and Gas Exploration

Dr. KHON Kinsornn (Head of Master program, ETM Research Unit), Ph.D., Power system, University of Toulouse III.
Power System, Microgrid, Optimization, Planning

Dr. CHHLONH Chhith, University Grenoble Alpes (UGA), France
Fault detection, reconfiguration, restoration, load balancing on LV system, Renewable Energy

Dr. SIO Sreymean, Petroleum Geology, ITC
Petroleum Geology, Mineral and Petroleum Exploration, Characteristic of Mineral Deposit and Petroleum System

Dr. PECH Sopheap, Vice-Head of Faculty of Geo-resources and Geotechnical Engineering, ITC.
Petroleum geology

Lecturer-researcher (1M, 1F)

Dr. VONGCHANH Kinnaeth, Ph.D. Institute of Technology Bandung (ITB) and Hokkaido University (HU)
Energy Efficiency, Renewable energy, Biomass energy, Drying, Heat Stress

Mr. EAM Dara, master's in electrical and Energy Engineering, Institute of Technology of Cambodia.

Fulltime-researcher (3M, 1F)

Mr. ETH Udaya, Master degree, Chulalongkorn University, Thailand
Renewable energy, Power system analysis, Energy efficiency, Rural electrification, control system

Mr. Heang Latin, Master degree, Institute of Technology of Cambodia
Biomass to energy, Mechanical design, Heat Stress

Mr Sorn Darong, Université Grenoble Alpes (UGA), Ph.D candidate, Institut Teknologi Sepuluh November (ITS). *Distribution Management System, Renewable Energy Micro grid planning & Energy Storage, Distribution automation & Real time monitoring system*

Mrs Eng Samphors, Ph.D candidate, Université de Mons, *Distribution Management System, Renewable Energy Micro grid planning & Energy Storage, Distribution automation & Real time monitoring system*

Academic and Research Partners

Universiti Teknologi Malaysia (UTM)
University of Liège
Université Claude Bernard Lyon 1
Kyoto University (KU)
Université Grenoble Alpes (UGA)
Kyushu University
National University of Singapore (NUS)

The Hong Kong Polytechnic University (PolyU),
Kyoto University (KU)

Non-academic partners

Ministry of Mines and Energy, Cambodia
Ministry of Education, Youth and Sports, Cambodia
Ministry of Industry, Science, Technology and Innovation, Cambodia
Cambodian Climate Change Alliance
APSARA Authority
The Energy Conservation Center Japan (ECCJ)
Asean Center of Energy (ACE)
JICA
G2Elab

Industrial Partners and NGOs

Electricité du Cambodge
GERES
ORBIT P. A Co.,Ltd
Health & Environment International Trust (HEIT)
Institut Francais pour la Performance du Batiment (IFPEB)
EnergyLab
GGGI
ATS
Sevea Consulting
EnerCam Co.,Ltd
Samnang Angkor Development Co Ltd
IMECS (CAMBODIA) CO.,LTD
SMEs involved in Solar Energy development
Angkor Resources Corp
Matlab Co., LTD
Renaissance Minerals (Cambodia) Limited
UNDP

Publications of ETM researchers for the last 5 academic years

From 2020-2021 to 2024-2025, there are in total **142 research outputs** from ETM unit classified into three categories: Index publications, non-index publications, and Conferences as shown in the Table 6.

Table 6: Summary of number of publications in the last 5 years.

Publication classification/year	2024-2025	2023-2024	2022-2023	2021-2022	2020-2021	Total
Index publications	1	18	3	14	11	47
Non-index publications	0	2	0	0	2	4
Conferences	25	30	27	5	4	91
Total	26	50	30	19	17	142

Annex 17. Detail information on research vision, mission, research interests of FTN Unit.

Cambodian Context

Although Cambodia is still mainly a rural country with 58% of the population being farmers, the processing of agricultural products is generally family-based or within informal industrial structures, with a low added value and a low level of technology, thus limiting their ability to compete in international markets. Only 10% of the industrial workers are in the food-beverage sector, a great majority (97%) of them working in micro-enterprises with no foreign investment. Besides the need of training technicians and engineers with a focus on agricultural products transformation and quality control, research centres with high level faculty staff are needed to do research on food processes, develop original and innovative products adapted to Cambodian tastes and habits (dry or fermented products), and assist the growing industrial sector in the quality and safety assessment of the food chain.

The Research Unit

The research unit Food Technology and Nutrition is established to enhance the development of food and beverage industries in Cambodia through cost-effective collaborative research and innovation programs between a diverse range of economic partners and the researchers of the Institute of Technology of Cambodia. The Research Unit promotes technical platforms and research projects to support the sectors of food and feed processing, food storage and preservation, and innovative products from agriculture and forestry. Other aspects as product design, cost-effectiveness, waste and by-products minimization, energy consumption reduction or valorisation of Cambodian biodiversity are also studied in the Research Unit. The main goal of this unit is to become a reliable center for research, training and consultancy services in food processing improvement, food fermentation, food product development and innovation, value addition of agricultural products, food nutrition, food safety, food quality analyses and food preservation in order to sustain the development of Cambodia.

Vision

To be an excellent unit for research, innovation, training and consultancy services in the field of food science and technology contributing to sustainable development of Cambodia.

Mission

- To increase the visibility of FTN research unit by strengthening researchers' capacity in food related fields to be nationally and regionally recognized
- To create standardized laboratories for research and hall technology for pilot scale
- To boost the research activities through local and international collaborations (Universities, Government, SMEs, NGOs)
- To promote prototyping and technology transfer; and to provide training and consultancy services to food industries and relevant stakeholders
- To disseminate scientific outputs through national and international publications and scientific events

Research Theme

1. Drying technology
2. Biotechnology (fermentation, microbiology, plant)

3. Extrusion technology
4. Extraction and purification technology
5. Beverage technology
6. Food product development and innovation
7. Food safety and shelf life improvement
8. Food composition and food contaminant analysis

Researchers

Senior researcher (0M, 10F)

Dr. PHAT Chanvorleak (Head of FTN Research Unit), Ph.D in Food Chemistry, Chung-Ang University, Anseong, South Korea

Food chemistry, Food Contaminant Analysis, Agrochemical Analysis, Mycotoxin Analysis

Dr. TAN Reasmey (Deputy Director of RIC), Ph.D in Bioengineering, Tokyo Institute of Technology, Japan

Food Biotechnology (Vegetable and cereal fermentation), Food Product Development and Innovation, Food and Water Microbiology, Anaerobic Digestion

Dr. IN Sokneang (Dean of Faculty of Chemical and Food Engineering), Ph.D in Science and Processes of Food and Bio-products, AgroParisTech, Paris, France

Food Safety and Risk Assessment, Nutrition, Food Processing

Dr. HOR Sivmey (Vice-Dean of Faculty of Chemical and Food Engineering), Ph.D in Biochemical and Physicochemical of Food, SupAgro Montpellier, France

Post-harvest Quality, Transformation of Tropical Fruits

Dr. HOUNG Peany, Ph.D in Chemical Science and Engineering, Tokyo Institute of Technology, Japan

Chemical Engineering

Dr. EK Pickmony, Ph.D. in Food Science, Washington State University, USA

Food Analysis, Cereal Science, Extrusion, Food ingredients, Food Quality, Starch, Biopolymers, Carbohydrates, Plant Proteins

Dr. SROY Sengly, Ph.D in Nutrition and Food Science, Montpellier SupAgro University, France

Food Nutrition, Food Processing and Food Development

Dr. MORM Elen, Ph.D in Chemical Engineering (Transfer, Interfaces and Processing), Free University of Brussels, Belgium

Drying of Agricultural Crops and Herbal, Bioethanol

Dr. PHUONG Heangsim, PhD in Processing Engineering, University of Nantes, France

Enzymes, Enzyme Activity, Biomass, Sugar, Proteins, Carbohydrate Biochemistry

Ms. YIN Molika, Ph.D in Food Science and Nutrition, Institute Agro/SupAgro Montpellier, France

Food Product Development and Sensory Evaluation

Lecturer-Researcher (3M, 3F)

Dr. MITH Hasika, Ph.D in Food Science, Université de Liège, Belgium.

Plant's Essential Oils/Extracts, Antimicrobials, Antioxidants, Food Microbiology, Food Preservation and Processing, Agro-Food Industry Management

Dr. YOEU Sereyvath, Ph.D in Science, Chonnam National University, South Korea
Biotechnology, Organic Compounds Analysis (Pesticides and others)

Dr. SUONG Malyna, Ph.D in Bioengineering, University of Montpellier, France
Plant Biodiversity, Microbiology, Genetic Engineering

Ms. NAT Yukleav, Master in Chemical Engineering, Sirindhorn International Institute of Technology, Thammasat University, Thailand
Chemical Engineering

Mr. HENG Oudam, Master of Biotechnology, Royal Melbourne Institute of Technology (RMIT) University, Australia
Genetics and proteomic technology, Next generation sequencing

Ms. THENG Sokuntheary, Master of Sciences in Microbiology, Montana State University, Bozeman, MT, USA
Bacterial cell culture, Protein purification, Cloning, Data analysis

Full-time researchers (3M, 7F)

Ms. CHIN Lyda, Master in Agro-Industrial Product Development, Kasetsart University, Thailand
Food processing, Food product development

Mrs. THANH Channmuny, Master in Health and Food Science, University of Montpellier, France
Food science, Food microorganism

Ms. PHAL Sivchheng, Master in Environment Design, Kanazawa University, Japan
Environmental Design

Mr. LY Luka, Master in Agro-Industrial, Institute of technology of Cambodia, Cambodia
Food processing, Quality control

Mr. SAY Manith, Master of Science in Food Technology, Khon Kaen University, Thailand
Snacks production, Frying process

Ms. OEUM Kakada, Master of Science in Basic Science, Chungnam National University, South Korea
Cell Biology, Microbiology, Cancer Biology, Cell cycle, Immunology, and Entomology

Ms. MAO Socheata, Master in AgroFood Chain, UMR LEREPS/ENSFEA, France
Volatile compound analysis

Mrs. MOM Vattana, Master in Food Science, Kasetsart University, Thailand
Food processing, Food product development

Mr. LAY Sovannmony, Master in Chemical Engineering, De la Salle University, Philippines
Extraction

Ms. SIENG Sreyvich, Master in Chemical Engineering, Gadjah Mada University, Indonesia
Chemical Engineering

Academic and Research Partners

Tokyo Institute of Technology, Japan
Yamagata University, Japan
Université de Liège, Belgium
Université de Bruxelles, Belgium
SupAgro-Montpellier, France
AgroSup-Dijon, France
Polytech Lille, France
Institut National Polytechnique de Toulouse (INP Toulouse), France
French Agricultural Research Centre for International Development (CIRAD), France
Institut de recherche pour le développement (IRD), France
Aix-Marseille Université, France
Université Claude Bernard Lyon 1, France
Kasetsart University, Thailand
Hanoi University of Science and Technology (HUST), Vietnam
Chung-Ang University, South Korea
Chonnam National University, South Korea

Non-academic partners

Ministry of Education, Youth and Sports, Cambodia
Ministry of Industry and Handicraft, Cambodia
Ministry of Commerce, Cambodia
General Secretariat of the National Science and Technology Council, Ministry of Planning
National Productivity Centre of Cambodia (NPCC), Cambodia
Ministry of Environment, Cambodia
Tonle Sap Authority, Cambodia
Department of Agro-industry, Ministry of Agriculture, Forestry and Fisheries, Cambodia
Ministry of Rural Development, Cambodia

Industrial Partners and NGOs

LyLy Company Co. Ltd
Cambodia Brewery Limited
Baca-Villa Productions Co Ltd
Cambodia Beverages Company
Mee Chiet
Eche Ngov Heng Food Production of Kampot Co., Ltd
Kang Sosedra Enterprise
Phnom Penh Safe Food
Healthy Food Enterprise
Dara Food Enterprise
DKSH
Indochina Rice Mill Limited
Food Enterprise
Confirel
Golden Silk
Rosmeric Paper

Chaktomuk Pest Services Co., Ltd (Orkin Cambodia)
 Ringacam
 Khmer Fresh Milk Co., Ltd
 Bodia Spa
 Aprati Foods (Cambodia) Ltd

Publications of FTN researchers for the last 5 academic years

For the last 5 academic years, there are in total **181** research outputs from FTN unit classified into three categories: Index publications, Non-index publications, and Conferences as shown in the Table 7 below.

Table 7: Summary of number of publications in last 5 years

Publication classification/year	2024-2025	2023-2024	2022-2023	2021-2022	2020-2021	Total
Index publications	5	14	14	8	7	48
Non-index publications	3	4	6	7	14	34
Conferences	41	17	16	11	14	81
Total	49	35	36	26	35	181

Annex 18. Detail information on research vision, mission, research interests of MIT Unit.

Cambodian Context

In Cambodia, the rapid growth of the IT and communications sector is at the heart of a digital transformation that spans across the entire nation, revolutionizing the way data is collected, transferred, and utilized. This evolution is especially significant in sectors such as agriculture, public health, and urban management, where the ability to generate vast amounts of data can lead to innovative solutions to pressing challenges. The emerging of generative AI and its popularity underscore the transformative potential of advanced technologies in creating new content, solving complex issues, and streamlining decision-making processes. Amidst this digital revolution, the integration of electronics and IoT technologies is pivotal for developing interconnected systems that enhance real-time data processing and communication capabilities. These technologies are crucial for facilitating immediate and effective responses to environmental crises, public health emergencies, and climate change challenges. Similarly, advancements in robotics and automation are driving significant improvements in efficiency and productivity across multiple industries, including food, mining, and manufacturing. By leveraging robotics, Cambodia is able to introduce smart, affordable, and innovative solutions that can automate complex processes, boost production efficiency, and foster the growth of SMEs with high-technology aspirations but limited capital.

As Cambodia navigates through these technological advancements, the emphasis on these key research areas is critical. These technologies not only promise to enhance the nation's responsiveness to immediate and long-term challenges but also pave the way for a future that embraces sustainable development and technological sophistication.

Vision

To be a center of excellence in developing innovative solutions within the realms of Intelligent Mechatronics, Artificial Intelligence, and Advanced Telecommunications.

Mission

To advance applied multidisciplinary research of Mechatronics, Artificial Intelligence, Telecommunication, and Aerospace through national and international collaborations for fostering national academic community and serving society.

The Research Themes

The combination of the different areas: information science and mechatronics allows developing specific topics related to the Cambodian context as:

- Aerospace and Space Engineering
- Artificial Intelligence (Machine Learning, Deep Learning, and Optimization)
- Intelligent Mechatronics
- Telecommunication and Internet of Things
- Operation Research
- Supply Chain Management

Researchers

Senior Researchers (10M, 0F)

Dr. VALY Dona (Head of MIT research unit), Ph.D. in Engineering Science and Technology, Université catholique de Louvain, Belgium.

Document Image Analysis, Computer Vision, Natural Language Processing

Dr. PO Kimtho, Ph.D. in Communication Engineering, Tokyo Institute of Technology, Japan.

Digital Signal Processing; radio communication; microwave and RF systems

Dr. SRANG Sarot, Ph.D. in Engineering, Tokyo Institute of Technology, Japan

Instrumentation, estimation, control and robotics, dynamic modelling, simulation, Artificial Intelligence.

Dr. PEC Rothna, PhD from Chung Ang University, Republic of Korea

Signal Processing and Mobile Communication

Dr. SRENG Sokchenda, Ph.D. in Telecommunication Engineering, INP Toulouse, France

Wireless communications, satellite communications, digital image processing

Dr. SIM Tepmony, Ph.D. in Information Science, Electronics and Communications, Telecom Paris, France

Markov theory; statistics; probability; maximum likelihood

Dr. THOURN Kosorl, Ph.D. in International Development Engineering, Tokyo Institute of Technology, Japan

Computational methods for electromagnetics, electromagnetic compatibility, wave propagation, pattern recognition, image processing, computer vision

Dr. PHAUK Sökkhey, Ph.D. in Interdisciplinary Intelligent System, majoring in Data Science, University of the Ryukyus, Japan

Educational Data Mining, AI in Education, Data Science in agriculture, and Data Science for Sustainable Development Goals (SDGs)

Dr. KIM Bunthern, Ph.D. in Electrical Engineering, INP Toulouse, France

Control system, robotics, renewable energy, automation, energy generation system

Mr. SOK Kimheng, Master in Computer Science, INSA de Rennes, France

Privacy, Security, Blockchain

Lecturer-researchers (9M, 0F)

Dr. NGET Rithea, Ph.D. in information Science, Japan Advanced Institute of Science and Technology, Japan

Network coding and IoTs

Mr. HEL Chanthan, Master in Telecommunication, Chulalongkorn University, Thailand

Wireless communication, Technology for agriculture

Mr. CHHORN Sopheaktra, Master in Electrical and Energy Engineering from Chulalongkorn University, Thailand.

Measurement instrument, Internet of Thing and Medical device

Dr. HAS Sothea, Ph.D. in Theoretical study and applications of machine learning methods, Sorbonne Université, France
Supervised/unsupervised/deep learning, aggregating and modeling

Mr. CHOU Koksai, Master in Logistics and Supply Chains System Engineering, Sirindhorn International Institute of Technology, Thammasat University, Thailand
Computer Vision, Robotic, Automation System, Supply Chain

Dr. KEAN Jeudy, Ph.D. in Telecommunication Engineering, INP-ENSEEIH Toulouse, France.

Dr. NOU Sotheany, Ph.D., Institute of Science Tokyo, Japan.
AI, Computer Vision, Image Processing

Dr. KUY Movsun, Ph.D. in Computer Network, Université de Namur, Belgium.
Computer Networking

Mr. KEO Chivorn, Master in Industrial and Mechanical Engineering from Institute of Technology of Cambodia, Cambodia.

Fulltime-researchers (5M, 0F)

Mr. PICH Reatrey, Ph.D. candidate in Network and Cyber Security, Institute of Technology of Cambodia, Cambodia.

Mr. CHIN Chan Daraly, Ph.D. candidate in Network and Machine Learning, INP-ENSEEIH Toulouse, France.

Mr. BUN Menghorng, Ph.D. candidate in Control and Diagnostic of Electrical System, INP-ENSEEIH Toulouse, France.

Mr. SREY Sokserey, Master of Engineering in Robotics, Institute of Technology of Cambodia, Cambodia.

Mr. TANG Sou Bun, Master of Engineering in Robotics, Institute of Technology of Cambodia, Cambodia.

Academic Partners

Université de Namur, Belgium
Université de Liège, Belgium
Université catholique de Louvain, Belgium
Université de Mons, Belgium
Tokyo Institute of Technology, Japan
Toyohashi University of Technology, Japan
Chitose Institute of Science and Technology, Japan
University of Fukui, Japan
Tokyo Polytechnic University, Japan
INP Toulouse, France
Institut Mines-Telecom, France
Universitas Pendidikan Ganesha, Indonesia
Universiti Kebangsaan Malaysia, Malaysia
University of Sydney, Australia

Non-academic partners

Asian Office of Aerospace Research and Development
Ministry of Education, Youth and Sports, Cambodia
Ministry of Water Resources and Meteorology, Cambodia
Ministry of Rural Development, Cambodia
Ministry of Industry and Handicraft, Cambodia
Ministry of Public Works and Transport, Cambodia
Ministry of Environment, Cambodia
Ministry of Health, Cambodia
Ministry of Culture and Fine Art, Cambodia
JICA, Japan
Institut Pasteur du Cambodge

Industrial Partners and NGOs

Solar Green Energy Co., Ltd. Cambodia
AI Farm
Louvain Cooperation
Eclosio
iDE
Yamato Green Co., Ltd.

Publications of MIT researchers for the last 5 academic years

From 2020-2021 to 2024-2025, there are in total 195 research outputs from MIT unit classified into three categories: Indexed Publications, Non-indexed Publications, and Conference Papers as shown in the Table below.

Table 8. Summary of number of publications in last 5 years

Publication classification/year	2024-2025	2023-2024	2022-2023	2021-2022	2020-2021	Total
Indexed Publications	3	7	8	6	6	30
Non-indexed Publications	5	10	2	6	6	29
Conferences	65	40	30	1	0	136
Total	73	57	40	13	12	195

Annex 19. Detail information on research vision, mission, research interests of MSS Unit.

Cambodian Context

To achieve the Sustainable Development Goals (SDGs), Cambodia has embraced the UN 2030 Agenda for SDGs. The country aims to become an upper middle-income status by 2030. To achieve this, the government has set up a policy to push up research and innovation that reflects the country's needs. Promoting domestic products is one of the focuses of the policy that requires research and innovation, specifically in engineering and construction materials.

Currently, raw rubber in Cambodia is one of the main agro-industrial products contributing about USD 400 million in 2021 to the country's economy through exportation. With the limitation of knowledge in rubber technology in Cambodia, almost all the value-added rubber products such as rubber bands, gloves, flip flops, and rubber inner tubes are imported to support the needs of the country. Moreover, if looking at the construction sector, new challenges have to be met: the construction sector boomed in 2016 with a total investment of 8.5 b\$. There are over 900 high-rise buildings (more than 5 floors), the majority of them in Phnom Penh and Sihanoukville. The fast evolution of Cambodian cities causes issues of quality (qualified human resources, redefining building standards), sustainability (depletion of local resources in construction materials), and affordability with eco-friendly materials that can adapt to local resources.

The MSS is not limited to the building industry, as there are also big challenges in recycling or recovering materials from waste, replacing polymers from fossil origin with natural polymers, and producing sustainable products from local materials. The Materials Science and Structure Research Unit was established to build up a group of researchers with similar skills and working fields as an interdisciplinary to achieve a common goal.

Research Unit

The Material Sciences and Structure Research Unit focuses on research and innovation trends in engineering and construction material, especially with low carbon impact materials and light structures, including geotechnical engineering, underground structures, structural engineering, minerals, polymers, ceramics and alloys to address specific needs for Cambodia. The research unit also pays attention to the Architectural Engineering field, especially the studies on affordable housing. Our researchers work closely with local and international partners to push applied research and transform it into innovation for promoting the economic growth of the country.

Vision

The vision of the MSS Research Unit is to be a national leading and excellent center for research, development, and innovation that can offer advanced technology and technical solutions in the fields of materials and structures to the industries. MSS Research Unit will be a source for technical innovation transfer, and producing scientists and engineers.

Mission

- Conduct basic and applied research focused on materials and structure
- Promote R&D linkage between government, universities, and private sectors
- Promote research capacity, scientific communications, and entrepreneurship
- Promote technology transfer, develop product prototypes, and push for commercialization

Research Theme

Materials Science and Engineering

- Mineralization
- Engineering materials such as bio-materials, polymer, rubber, and ceramic
- Construction Materials such as stabilized soils, eco-pave blocks, cementitious material, and bitumen

Structural Engineering

- Structural design & performance of buildings
- Heritage Preservation
- FEM simulation and analysis
- Composite structures
- Post-installed anchors such as bundled and glass fiber rebars

Architectural Engineering

- Life cycle assessment
- Building Information Modeling
- Green buildings
- Sustainable design

Transport and Infrastructure

- Air pollution control
- Traffic
- Infrastructure development
- Bridge engineering

Researchers

Senior Researchers (8M, 2F)

Dr. DOUNG Piseth (Head of MSS Research Unit), PhD in Civil Engineering, Tokyo Institute of Technology, Japan
Steel structures, Tall steel/concrete building systems, Earthquake engineering, and Structural engineering

Dr. YOS Phanny, PhD in Materials Engineering, Kyushu University, Japan
Natural rubber, Natural rubber latex, Polymer composites

Dr. HAN Virak, PhD in Civil Engineering, Kochi University of Technology, Japan
Civil engineering materials, Concrete, Modeling

Dr. HIN Raveth, PhD in Material Engineering, University of Rennes 1, France
Mechanical Behavior of Materials, Glass Structures, Civil Engineering

Dr. PROK Narith, PhD in Civil Engineering, Kochi University of Technology, Japan
Soil-structure interaction; earthquake; tsunami

Dr. KAN Kuchvichea, PhD in Civil Engineering, Université Libre de Bruxelles, Belgium
Soil mechanics, Construction materials

Dr. BUN Polyka, PhD in Material Engineering, Institute of Technology of Cambodia, Cambodia

Simulation of thin wall structures, and Concrete and ceramic materials

Dr. SEANG Sirisokha, PhD in Economy Geology, Kyushu University, Japan
Earth mineral, Mineralization, Geology

Dr. HENG Sounean, D. Eng., INSA Rennes, France
Mechanics of materials and structures

Dr. OEUNG Thaileng, D. Eng., INSA Rennes, France
Steel-concrete composite materials and structures

Dr. CHHIT Saosometh, D. Eng., University of Ghent, Belgium
Materials Science

Lecturer-Researchers (0)

Full-time Researchers (5M, 3F)

Mrs. AUN Srean, PhD candidate, Université de Rennes, France, and ITC
Research area: Biomaterials/ Bioplastic innovation, Air pollution control

Mrs. KETH Kannary, PhD candidate, Université Libre de Bruxelles, Belgium, and ITC
Research area: Architectural design, Building Information Modeling (BIM)

Mrs. TAING Kimnennh, PhD candidate, University of Liege, Belgium, and ITC
Research area: Sustainable design, Architecture, Numerical model

Mr. LONG Makara, PhD candidate, University of Liege, Belgium, and ITC
Research area: Sustainable building design, Life cycle assessment, Green building

Mr. SOM Chansamnang, PhD candidate in Civil Engineering, INSA Rennes, France, and ITC
Research area: Effect of the addition of natural fibers on shrinkage, Cracking risk, and Healing capacity of cementitious materials

Mr. PLACK Sokhit, PhD candidate, Institute of Technology of Cambodia
Research area: Transport engineering, Traffic and air pollution

Mr. NUTH Visal, PhD candidate, Université de Lorraine, France, and ITC
Research area: Soil mechanics, Road structure

Mr. CHANN Socheata, PhD candidate, INSA Rennes and ITC
Research area: Tempered glass, Foamed concrete with recycled and geopolymer materials

Academic and Research Partners

Université Libre de Bruxelles, Belgium
Université de Liege, Belgium
Toronto Metropolitan University, Canada
INSA de Rennes, France
Sorbonne Paris Nord University, France
Université de Lorraine, France
Université de Rennes, France

Université de Rennes 1, France
 University of Stuttgart, Germany
 Fukuoka University
 Kanazawa University, Japan
 Kyushu University, Japan
 Tokyo Institute of Technology, Japan
 Yokohama National University, Japan
 Universiti Sains Malaysia, Malaysia
 Chulalongkorn University, Thailand
 King Mongkut's University of Technology Thonburi (KMUTT), Thailand

Non-Academic Partners

Ministry of Education, Youth and Sports, Cambodia
 Ministry of Public Works and Transport, Cambodia
 Ministry of Culture and Fine Arts, Cambodia
 Ministry of Mines and Energy, Cambodia
 Ministry of Environment, Cambodia
 Cambodia Rubber Research Institute, Cambodia

Industrial Partners and NGOs

SNP-PT International Co., Ltd, Thailand
 Fyfe Asia Pte Ltd, Singapore
 IKEE group, Cambodia
 HILTI, Thailand
 Cart Tire Co., Ltd
 ISI Steel

Publications of MSS researchers for the last 5 academic years

From 2020-2021 to 2024-2025, there are in total 129 research outputs from the MSS unit classified into three categories: Indexed Publications, Non-indexed Publications, and Conference Papers as shown in the Table below.

Table 9: Summary of number of publications in last 5 years

Publication classification/year	2024-2025	2023-2024	2022-2023	2021-2022	2020-2021	Total
Indexed Publications	4	5	5	2	3	19
Non-indexed Publications	8	1	3	1	2	15
Conference Papers	21	22	41	9	2	95
Total	33	28	49	12	7	129

Annex 20. Detail information on research vision, mission, research interests of WAE Unit.

Cambodian Context

Water is a huge issue in the world and particularly in Cambodia. Although the country is crossed by the Mekong river and possesses a large fresh water lake (the Tonle Sap Great lake), Cambodia is vulnerable to the succession of annual floods and droughts with severe episodes. Many problems arise due to changes in land use, natural resources exploitation, pollution, and climate change. Moreover, there is concern with current and future situation of intensive use of ground water for irrigation in the dry season, sea water intrusion in the coastal areas, heavy metals release due to mining activities, non-point source pollution from agriculture, soil erosion, air pollution, and urbanization with no wastewater treatment. Besides regional water environmental issues, the quality of water is low in rural areas or low-income urban environments with contamination of agrochemical, faecal contamination and strong arsenic concentration in ground water in the Lower Mekong area.

Research plays a pivotal role in environmental protection by providing the knowledge to better understand and manage issues such as climate change and water quality & availability. In parallel, the development of innovative and environmentally friendly technologies can offer sustainable economic opportunities through the responsible management of both natural and man-made resources. Often, environmental challenges go beyond national frontiers and require a coordinated approach in ASEAN and at global level.

Vision

Our vision is to become a well-known knowledge hub to provide the scientific research information on utilization and management of water and environment for sustainable development in the region.

Purposes

- To bring together institutional-wide centers and researchers to tackle national, regional and global water and environmental issues through multi and interdisciplinary research under Research and Innovation Center.
- To develop and offer graduate program on Science in Water and Environmental Engineering that support to country development and benefit to civil society.
- To provide knowledge, skill, tool, and awareness pertaining to water and environmental quality and human-environment interactions in order to improve and sustain the function of environmental systems, protect human health and economic growth.

Mission

1. Conducting multi-disciplinary and interdisciplinary both basic and applied research on the utilization and protection of the environment, minimization and treatment of pollution particularly to the water resources, hydrological and ecological systems.
2. Developing, demonstrating and disseminating new finding and methodology supporting to science and engineering for the environmental management and monitoring, disaster management, ecological restoration, treatment and disposal of pollution.
3. Collaborating on the local and global scale in research and education to protect the precision resources that comply with national policy and SDG to sustain human life.
4. Educating and training personnel for management, supervision and operation of water resources and environmental systems.

Research Theme

The research unit Water and Environment is established to address the needs of Cambodia in this very large field. The research Unit has strong interactions with a worldwide community of

researchers and stakeholders focused on various research theme. The research activity and themes include the following but not limited to:

- **Hydrology and Water Resources Management:** Hydrological Modeling and Analysis, Hydrogeological Analysis, Groundwater and surface water interaction, Water Balance, Soil Erosion, River Bank Erosion and failure, Land Use Change, Environmental Modelling, Watershed Carrying Capacity, GIS and Remote Sensing, Hydraulic Structure ...
- **Climate Change and Disaster Risk Management:** Weather Forecasting, Weather Forecasting, Climate Change Modeling, Climate Change Downscaling, Climate Change Impacts, Climate Change Vulnerability and Adaptation, Tropical Meteorology, Flood/Drought Management, other hazards...
- **Urban Water Supply, and Wastewater Treatment:** Drinking Water Assessment and Treatment, Pollution Management, Waste Water Treatment, WASH, Water Treatment Technology, Microbiology, Water Quality Modeling, Water Biochemistry...
- **Coastal and Marine Environment (CME):** Seawater Intrusion, Coastal Processes and Sediment Transport, Coastal Wetland Ecosystem, Sea Surface Current, Sea Grass and Coral Protection, Wave Impact on Coastal and Offshore Structures, Coastal Karst Landforms, Coastal Geology, Coastal Flood Management...
- **Soil and irrigation:** Soil-Plant-Water Relation, Agricultural Water Management, Soil Quality.
- **Urban Environmental Management (UEM):** Air Pollution Management, Solid Waste Management, Hazardous Waste Management, Environmental Health and Risk Assessment

Researchers

Senior Researcher (8F, 4M)

Dr. PENG Chanthol (Head of WAE Research Units), Dr. Eng. in Life Science and Technology, Tokyo Institute of Technology, Japan.

Food and Environmental Microbiology, Water Quality Monitoring

Dr. CHHOUN Kong, Ph.D. in Environmental Engineering, University of the Philippines-Diliman and Tokyo Institute of Technology, Japan.

Environmental Hydrology, integrated water resources management, watershed hydrology

Dr. ANN Vannak, Ph.D in Water Science and Technology, Universitat de Girona, Spain

Water-Soil-Plant-Microorganism Interactions and Biodiversity, Hydrologic processes in a river basin, Climate change-related topics

Dr. KET Pinnara, Ph.D. in Agricultural Science and Biological Engineering, University of Liege-Gembloux Agro-Bio Tech, Belgium

Irrigation water saving for crop production

Dr. TY Bore Borey, Ph.D. in Environmental Engineering, University of the Philippines-Diliman and Hokkaido University, Japan

Leaching, Wastewater Treatment, Water and Wastewater Treatment, Ion Exchange Resins

Dr. KHOEURN Kimleang, Ph.D. in Sustainable Resources Engineering, Hokkaido University, Japan.

Water and Wastewater Treatment, Mine Water and Remediation, Heavy Metal Leaching and speciation, Extraction, Sorption-Desorption Processes, Environmental Chemistry, Geochemical Modeling, Environmental Pollution and Waste Management

Dr. THENG Vouchlay, Dr.Eng. in Civil and Environmental Engineering, Tokyo Institute of Technology, Japan.

Water Quality Modelling and Assessment, Water and Wastewater Treatment

Dr. SANG Davin, PhD in Chemistry and Process Engineering (Double degrees) from École Nationale Supérieure de Chimie de Rennes (ENSCR), France.

Water and wastewater treatment, Environmental Analysis, Water Analysis, Liquid chromatography, Adsorption, Membrane bioreactor, Treatment of micropollutants, Activated carbon production from solid waste.

Mrs. HANG Leakhena, M. Eng. in Environmental Engineering, University of The Philippine Diliman, Philippine.

Indoor/Outdoor air pollution

Dr. BUN Saret, PhD in Environmental Engineering from Chulalongkorn University, Thailand.

Water and Wastewater Engineering

Dr. HAM Phaly, PhD in Environmental Engineering from Chulalongkorn University, Thailand.

Water and wastewater, air pollution control.

Dr. HEU Rina, Dr. Eng. in Civil and Environmental Engineering, Tokyo Institute of Technology, Japan.

Water Quality and Environmental Assessment, Water Treatment Technology, Environmental Ecosystems, Water Supply and Sanitation

Lecturer-Researcher (3F, 5M)

Dr. DOUNG Ratha, PhD in Environmental Engineering, University of Philippines Diliman (UPD) and Tokyo Institute of Technology (TIT), Japan

Hydrogeology; groundwater modeling; coastal aquifer management

Dr. PEN Sytharith, Ph.D in Environmental engineering, Hokkaido University, Japan

Bed instability in suspended load dominated environments

Dr. EANG Khy Eam, Ph.D. in Sustainable Resources Engineering, Hokkaido University, Japan.

Environmental Geochemistry, Water Environment, Hydrogeology, Geochemical Modeling and Solute Transport, Sustainable Resources Management, Geomechanics and Rock Slope Stability

Dr. SOK Ty, PhD in Functional Ecology and Environment (Double Degree) from National Polytechnic Institute of Toulouse (INP-Toulouse), France.

Hydrology, Water Resources, Climate change and Environmental Monitoring and Assessment

Dr. SONG Layheang, PhD in Continental Surfaces and Interfaces, Hydrology, Université Toulouse III - Paul Sabatier, France.

Hydrology, Soil Erosion, Disaster and Agricultural Irrigation and Modeling.

Dr. HEU Rina, Dr. Eng. in Civil and Environmental Engineering, Tokyo Institute of Technology, Japan.

Water Quality and Environmental Assessment, Water Treatment Technology, Environmental Ecosystems, Water Supply and Sanitation

Ms. DOEURN Seyha, Master in Environmental Management, Kyoto University, Japan

WASH (Water, Sanitation, and Hygiene), Drinking water quality, Water Supply, and Wastewater characterization

Dr. MUON Ratha, PhD in Environmental Science (Double Degree) from Sorbonne Université, France.

Soil Science, Mapping (GIS), Ecosystem services provide by termite mounds

Full-time Researcher (4F, 5M)

Ms. PHOEURN Chanarun, Master in Environmental Engineering, University of the Philippines-Diliman

Water Quality, GIS, Irrigation System

Mr. Kimhuy Sok, Master in Water Resources Engineering, Chulalongkorn University, Thailand

Water Resources Management, Drought Assessment, Shoreline Evolution, Nearshore Sediment Transport, Radiometric Dating of Sediment

Ms. LAI Chenda, Ph.D candidate (double degree) in Water and Environment, Institute of Technology of Cambodia, Cambodia and Agronomy and Bio-engineering at ULiège, Belgium.

Water Quality, Nutrient Leaching Management, Soil Science, Agronomy, Plant Nutrition

Mrs. CHANTO Monychot Tepy, Ph.D candidate (year 1), Master in Environmental Design, Kanazawa University, Japan

Water Quality and Pollution, Biological Wastewater Treatment, Environmental Biotechnology, Microbial Community Analysis, Environmental and Food Microbiology

Mr. CHAN Ratboren, Ph.D candidate (year 1), M. Eng. in Environmental Engineering, Kasetsart University, Thailand.

Water Quality Assessment, Water and Wastewater Treatment, Membrane Bioreactor, Antibiotics Treatment.

Mr. POV Kakda, Master in Water and Environmental Engineering, Institute of Technology of Cambodia, Cambodia

Remote Sensing, Geo-resources (Geological, Geothermal, Mineral Exploration) and Environment.

Mr. PHUONG Sovathana, Master in Microbiology and Microbial Technology, Chulalongkorn University, Thailand

Environmental Microbiology, Bioremediation, Microplastics Pollution, Antibiotic Resistance

Ms. THEAP CHAKRYA, Master in Sustainable Energy and Resources Engineering, Kasetsart University, Thailand.

Sustainable Energy, Renewable Energy, Biomass Conversion, Thermal Treatment, Waste To Energy, Solid Waste Management.

Mr. SOK Sereyvathana, Ph.D candidate (year 2). Master in Water and Environmental Engineering, Institute of Technology of Cambodia, Cambodia
Water Treatment Technology, Micropollutant Removal, Renewable Energy, and Adsorption.

Academic Partners

Royal University of Agriculture, Cambodia
Royal University of Phnom Penh, Cambodia
Tokyo Institute of Technology, Japan
Tokyo University of Agriculture and Technology, Japan
University of Girona, Spain
Université de Toulouse, France
Université de Liège-Gembloux, Belgium
CARE, Ho Chi Minh City, Vietnam
Guilin University of Technology, China
Wuhan University, China
Kanazawa University, Japan
Kyoto University, Japan
Chulalongkorn University, Thailand
University of Nantes, France
CNRS, France
IRD, France
Etc.

Non-academic partners

Ministry of Education, Youth and Sports, Cambodia
Ministry of Water Resources and Meteorology, Cambodia
Ministry of Rural Development, Cambodia
Ministry of Industry and Handicraft, Cambodia
Ministry of Public Works and Transport, Cambodia
Ministry of Environment, Cambodia
JICA, Japan
JST, Japan
AFD, France
APN, Japan
Etc.

Industrial Partners and NGOs

Phnom Penh water supply Authority
SAFEGE
BORDA
GRET
B2G
Weventure

Publications of WAE researchers for the last 5 academic years

In last five academic year from 2020-2021 to 2024-2025, there are in total 184 research outputs from WAE unit classified into three categories: Indexed Publications, Non-indexed Publications, and Conference Papers as shown in the Table below.

Table 10 : Summary of number of research publications in last 5 years

Publication classification/year	2024-2025	2023-2024	2022-2023	2021-2022	2020-2021	Total
Indexed Publications	7	24	27	10	14	82
Non-indexed Publications	5	4	7	6	3	25
Conference Papers	33	4	25	15	0	77
Total	45	32	59	31	17	184

Annex 21. New Research Projects in 2024-2025 of ETM Unit.

No.	Project/Research Topic	Name of Researcher	Fund	Total budget	Period	Objectives	Status
1	Capacity for Cambodian Energy Efficiency (CapCEE)	Dr. VONGCHAN Kinnaeth Dr. CHAN Sarin Mr. HEANG Latin	LED	552,322	2025-2026	- CEMAT program is upgraded and equipped to offer quality training services for energy managers and auditors - SES-ITC strengthens the energy efficiency to the public and private sectors	New
2	Python-Based LV Microgrid Planning Strategies: Clustered Topology and PV Hosting Capacity	Dr. VAI Vannak Mr. EAM Dara Mr. SUK Sievlong Ms. NEOV Yoklin Mr. YOU Lyhour Mr. HEANG Sokleap	ZE: Zero-Emission Energy Research	3000 USD	2024-2025	- Conduct desk research for microgrid planning and load profiles, - Develop an algorithm for optimal microgrid topologies: Clustering techniques with Python-based open-source software, - Develop an algorithm for PV hosting capacity at the clustered households with different tariffs, and validate with a small-scale prototype for monitoring and management	New
3	Training Programme to Promote Low Carbon Buildings in Cambodia	Dr. CHAN Sarin Dr. VONGCHANH Kinnaeth Mr. HEANG Latin	GGGI	89,970	2024-2027	- Recruit and train 20 Qualified Master Trainers (MTs) for delivering the LCB training programme - Translate and Adapt Training Modules into Khmer. - Organize and Deliver the Training Programme (2.5 Years).	New
4	Cooling Homes - Innovative & Low impact Living	Dr. CHAN Sarin Dr. VONGCHANH Kinnaeth Mr. HEANG Latin	Clean Cooling Collaborative	597,745 USD	2025-2027	Retrofitting for Energy Transition and Resilience - Sustainable Ways to Innovate for Thermal Comfort in Housing. Specific Objective: - The types of residential buildings targeted by the Project - Whether these buildings are equipped with air conditioning or not; - Relative income level of the residents or homeowners within the local context.	New

Annex 22. New Research Projects in 2024-2025 of FTN Unit.

No.	Project/Research Topic	Name of Researcher	Fund	Total budget	Period	Objectives	Status
1	The development of functional beverages with improved nutritional and sensorial properties toward local economic growth through diversifying Cambodia's agriculture products	Dr. PHAT Chanvorleak Dr. TAN Reasmey Dr. MITH Hasika Dr. SROY Sengly Dr. EK Pichmony Dr. THANH Channmuny Dr. HOUNG Peany	MoEYS	1,488,000	2025-2029	To develop soy-based drink, mango drink, and fermented drink for commercialization	New
2	Improvement of quality of Kimchi and garlic/ginger in honey	Dr. MITH Hasika	CAPRED & KE	8,000	2025	Product quality improvement	New
3	Pesticide Analysis in irrigation water of different rice practices_WAT4CAM	Dr. PHAT Chanvorleak Dr. YOEUN Sereyvath	CIRAD-AFD	24000	2024-2025	To investigate pesticide residues in heavy rice production region in Kanghot, Battambang, and Rovieng, Preah Vihear	New

Annex 23. New Research Projects in 2024-2025 of MIT Unit.

No.	Project/Research Topic	Name of Researcher	Fund	Total budget	Period	Objectives	Status
1	Integrating the Electrification and Smart Mechanisation of Two-Wheel Tractors with Precision Agriculture for Improved Productivity and Sustainability	Dr. SRANG Sarot (PI) Dr. VALY Dona Mr. KEO Chivorn Mr. SREY Sokserey	ACIAR	200,000	2024-2029	The aim of this project is to build the technological and socio-economic foundations for the design, manufacture, and field evaluation of electric and smart two-wheel tractors with precision agriculture capability, aiming to critically evaluate its potential to enhance the sustainability and productivity of Cambodian agriculture.	New
2	Development of Two Mobile Robots for Joining a Robocon Competition in 2025	Dr. SRANG Sarot (PI) Mr. SREY Sokserey	Takahashi Industrial & Economic Research Foundation	7,000	2024-2025	To provide lab members with a real and competitive environment to enhance their robotics skills through the design, development, and deployment of two mobile robots for the 2025 robotics competition.	New
3	Design and Implementation of Health Monitoring for Older People	Dr. NGETH Rithea (PI) Mr. SUM Rithea	Takahashi Industrial & Economic Research Foundation	5,000	2024-2025	To design and implement an affordable health monitoring system for older people living in rural area in Cambodia. Specific objectives are as following. (1) Design and develop an affordable ECG monitoring system; (2) Design a user interface; (3) Design an uploading data protocol to a cloud server.	New
4	Autonomous Land-Leveling Robot Tractor	Dr. SRANG Sarot (PI) Mr. TANG Sou Bun	Ministry of Agriculture, Forestry and Fishery	20,000	2024-2025	Develop a robot tractor capable of autonomously or semi-autonomously leveling agricultural land.	New
5	"Kayvika" Khmer Sign Language Translation	Mr. CHOU Koksai LANG Bandithvipho	Khmer Enterprise	1,500	2024-2026	The research aims to create a two-way sign language translation application. The app will translate from Khmer voice to sign language and will translate from sign language to Khmer voice.	New

Annex 24. New Research Projects in 2024-2025 of MSS Unit.

No.	Project/Research Topic	Name of Researcher	Fund	Total budget	Period	Objectives	Status
1	Enhanced Durability and Sustainability of Asphalt Concrete through Waste Plastic Recycling	Dr. Kuchvichea KAN, PI Dr. Phanny YOS, Co-PI	JICA-LBE	14,950	2025-2026	1. Developing Modified Emulsion Asphalts using recycled waste plastic and waste oil. 2. Developing cold-mixed asphalt concrete that incorporates recycled plastic pellets, providing a sustainable, climate-resistant pavement material	New
2	Hybrid Coatings For The Photodynamic Inactivation Of Microbial Infections	Mrs. AUN Srean Prof. YANN Molard Assoc. Prof. Dr. Marian Amela-Cortes Asst. Prof. Dr. YOS Phanny	BGF-MoEYS	42,500	2024-2027	1) to design and characterize the robust innovative multi-component combination for antimicrobial disinfection under visible light irradiation	New
3	Climate-resilient soil stabilization in cambodia's SUBGRADE: adapting to the challenge of flooding and seasonal variations.	Mr. Nuth Visal Prof. Olivier CUISINIER, (Supervisor, UL) Dr. KAN Kuchvichea, (Supervisor, ITC)	BGF-MoEYS	42,500	2024-2027	1) to pinpoint challenges of flooding and variation in temperature of mechanical property. 2) to enhance the soil subgrade in response to Cambodian seasonal challenges	New
4	Natural Rubber Latex Powdered Gloves for Medical applications	Dr. Yos Phanny Ms. Sreng Laymey	Takahashi	4990	2024-2025	- Produce examination powdered gloves from natural rubber latex - Examine antimicrobial effect biofillers such as pomelo, mangosteen, ginger, and sugarcane bargasse on latex gloves	New

5	Experimental and Numerical Studies of the Behavior and Durability of Foam Concrete Based on Recycled Glass and Natural Fibers	Mr. Chann Socheata Dr. Hin Raveth	Eiffel-MoEYS	50,000	2024-2027	To investigate the behavior of concrete with recycled glass and natural fibers	New
---	---	--------------------------------------	--------------	--------	-----------	--	-----

Annex 25. New Research Projects in 2024-2025 of WAE Unit.

No.	Project/Research Topic	Name of Researcher	Fund	Total budget	Period	Objectives	Status
1	SATREPS: development and social implementation of greenhouse gas emission reduction technologies in paddy fields of west tonle sap lake by establishing a large paddy area water management system	Dr. SOK Ty Dr. SONG Layheang Dr. Peng Chanthol Dr. Ket Pinnara	SATREPS/JST/JICA	250000	2024-2028	Preparation to launch in April 2024	New
2	Integrated River Basin Management of the Mekong Basin Tributary for Adaptation to Climate Change	Dr. SOK Ty Dr. SONG Layheang Dr. OEURNG Chantha	Mekong Korea Cooperation Fund (MKCF)	380000	2024-2027	<ul style="list-style-type: none"> - Identify flood hazards through field-based and modeling approaches by integrating extensive update datasets (hydrology, climate, land use, water quality, infrastructure) and strengthening community resilience. - Assess soil erosion and water quality to identify sustainable river basin management measures. - Introduce nature base solution (NBS) into watershed management for improvement of flood risk and soil loss and biodiversity within the river basin. - To build capacity for integrated river basin management at the national and sub-national levels. 	New

						To develop and mainstream the policy brief for multi-stakeholders from the sub-national to the national level.	
3	Addressing Water Scarcity through Groundwater Use: Development of Solar-Powered Groundwater Treatment System for Remote Area of Cambodia	Dr. BUN Saret Dr. HAM Phally	MTT-RRP	33000	2024-2025	(i) preliminary assessment including groundwater quality assessment as an input data for treatment technology design and social survey for assessing the demand and perspective of the target end users of the newly developed water treatment unit, (ii) optimization of groundwater treatment process in terms of treatment performance and power consumption, and (iii) evaluation the operation performance of prototype system in the real scale community.	New
4	Development of Eco-Friendly Microplastic Removal Filters from Seawater for Sea Salt Farms in Cambodia	Dr. THENG Vouchlay Ms. DOEURN Seyha, Mr. HENG Oudam, Dr. PENG Chanthol, Mr. PHUONG Sovathana	UNDP	39000	2024-2025	The main objective of the project is starting a pilot EMRF for the first microplastics (MPs) removal from seawater for salt farm in Cambodia, and raise awareness among the people about the risk of consuming microplastics through the food chain	New
5	Establishment of Sustainable Groundwater Management Platform in the Lower Mekong Region	Dr. EANG Khyeam	Mekong-Republic of Korea Cooperation Fund (MKCF)	499647	2025-2028	To develop a Comprehensive Groundwater Database to track and analyze groundwater changes annually, serving as a benchmark for sustainable management in the Lower Mekong Region. To promote Regional Collaboration among Mekong countries and the ROK for Adaptive Groundwater Governance, integrating multi-year trend analysis into cross-border policy frameworks and capacity-building efforts.	New
6	Establishing an Evidence-based National Adaptation	Dr. SOK Ty Dr. SONG Layheang	Ministry of Environment (GREEN CLIMATE FUND)	60000	2024-2025	To analyze climate data and write a National Climate Report for Cambodia	New

	Plan (NAP): National Climate Report	Dr. KET Pinnara Mr. HOUT Meng Hour					
7	Sustaining the shared groundwater resources of the Transboundary Cambodia-Vietnam Mekong River Delta aquifer under climate change impacts through Strategic Gender equality, disability, and social inclusion (GEDSI) tools and suitable Nature- based Solution (SAGA)	Dr. PEN Sytharith, Dr. SANG Davin	SEI	5000	2024- 2025	-Enhance resilience in the face of climate change by integrating energy, food, and water nexus -Gender mainstreaming in groundwater resources management	New
8	Evaluation of Nature-based solutions for the enhancement of urban water security in South-East Asian Cities	Dr. PEN Sytharith Dr. HEU Rina	APN	8000	2024- 2025	Access water supply and demand scenario of the Phnom Penh city of Cambodia. Identify feasible nature-based solution to enhance urban water security for drinking water and industrial water uses. Assess environmental and socio-economic impacts of the feasible NBS using water case study.	New
9	Anticipating the inversions of the Tonle Sap river (INVERSAP)	Dr. DUONG Ratha Dr. Paul Baudron, Dr. Ratha Doung, Dr. Khy Eam Eang,	IRD	100000	2024- 2025	Anticipating the inversion of the Tonle Sap river through collaborative sampling.	New

		Mr. Sambo Lun, Dr. Sytharith Pen, Mr. Vuthy Chork, Dr. Sylvain Massuel Mr. Jonathan Van Hanja Dr. Kong Chhuon					
10	Research collaboration on sustainable water resources management in Koh Ker heritage site	Mr. SOK Kimhuy Mr. Chork vuthy, Dr. Heng Sokchhay, Chhoun Kong	NAPV	12000	2024- 2025	1. Planning atlas; 2. Hydraulic infrastructure system; 3. Water resources utilization; 4. Natural disasters; 5. Catchment development plans	New
11	Restoration of the Preah Vihear Temple's Gopura V (Phase II)	Mr. SOK Kimhuy Mr. Chork vuthy, Dr. Heng Sokchhay, Chhoun Kong	NAPV	51500	2024- 2025	1. Seismic survey; 2. Hydrological study; 3. Geotechnical study; 4. Technical presentation and meeting at province	New
12	Mutual learning toward just-in-time information for grassroots climate adaptation in the lower Mekong countries	Dr. PENG Chanthol Ms. DOEURN Seyha; Dr. THENG Vouchlay	Toyota Fondation	60000	2024- 2026	Understand best practices of people along the Mekong River toward climate change adaptation for hydrological change of the Mekong River (water level change and local adaptation) and share the knowledge between Thailand and Cambodia	New

Annex 26. List of Ongoing Projects in ETM in 2024-2025.

No.	Project/Research Topic	Name of Researcher	Fund	Budget 2023-2024	Total budget (USD)	Period	Objectives	Outputs
1	Accelerating Digital Transformation for Higher Education Institutions in Southeast Asia (DX.SEA)	Dr. OR Chamoly Mr. LAY Heng Dr. VALY Dona	Erasmus+	N/A	42534	2023-2025	<ul style="list-style-type: none"> - developing digital campus blueprint - enhance digital leadership competencies - improve the quality of online learning and teaching - improve methodologies and pedagogical approaches for digital learning 	<ul style="list-style-type: none"> - The primary deliverables of this project are a digital transformation blueprint, training materials, and Train for Trainers (ToT) for developing campus ICT infrastructure and a digital learning management system, designing digital content for digital education, and implementing effective - Digital teaching, evaluation, and quality assurance
2	Training Programme to Promote Low Carbon Buildings in Cambodia	Dr. CHAN Sarin Dr. VONGCHANH Kinnaeth Mr. HEANG Latin	GGGI	44985	89970	2024-2027	<ul style="list-style-type: none"> - Recruit and train 20 Qualified Master Trainers (MTs) for delivering the LCB training programme - Translate and Adapt Training Modules into Khmer. - Organize and Deliver the Training Programme (2.5 Years). 	<ul style="list-style-type: none"> 1) 20 master trainers will be recruited and trained in training of trainer (ToT) 2) All training modules will be translated into Khmer 3) 300 trainees will be recruited and trained on low carbon building
3	Platform for research and training on Power System	Dr.KHON Kimsornn Mr.SUK Sievlong Dr. VAI Vannak Mr. EAM Dara Dr. BUN Long	AFD	468929	1048685	2023-2027	<ul style="list-style-type: none"> 1) To provide training skill to EDC staff , upgrade laboratories, and training facilities, 2) To produce highly qualified human resource in the field of power system at master and PhD levels. 	30 master's degree , 2 PhD Double-degree, 2 PhD Internationals

4	Python-Based LV Microgrid Planning Strategies: Clustered Topology and PV Hosting Capacity	Dr. VAI Vannak Mr. EAM Dara Mr. SUK Sievlong Ms. NEOV Yoklin Mr. YOU Lyhour Mr. HEANG Sokleap	ZE: Zero-Emission Energy Research	3000	3000	2024-2025	1) Conduct desk research for microgrid planning and load profiles, 2) Develop an algorithm for optimal microgrid topologies: Clustering techniques with Python-based open-source software, 3) Develop an algorithm for PV hosting capacity at the clustered households with different tariffs, and validate with a small-scale prototype for monitoring and management	Test the proposed method with different test systems
5	Capacity for Cambodian Energy Efficiency (CapCEE)	Dr. VONGCHAN Kinnaeth Dr. CHAN Sarin Mr. HEANG Latin	LED	147152	552322	2025-2026	<ul style="list-style-type: none"> - CEMAT program is upgraded and equipped to offer quality training services for energy managers and auditors - SES-ITC strengthens the energy efficiency to the public and private sectors 	<ul style="list-style-type: none"> 1) At least 60 certified energy managers and auditors certified CEMAT by the end of the project 2) Reduction of 20,000kg of CO2 emissions due to energy audits conducted by certified managers 3) ITC becomes a recognized national centre for energy efficiency training

Annex 27. List of Ongoing Projects in FTN in 2024-2025.

No.	Project/Research Topic	Name of Researchers	Fund	Budget (2024-2025)	Total budget (USD)	Period	Objectives	Outputs
1	Agroecology and Safe Food System Transitions (ASSET)	Dr. HOUNG Peany	EU/AFD and GRET	55200	231000	2020-2025	To make food and agricultural systems in Southeast Asia more sustainable, safer and inclusive, through harnessing the potential of agroecology to transform them	<ul style="list-style-type: none"> - Training/staff capacity building - Staff mobility - Strengthening network/collaboration
2	Development of high nutritional value farmed fish and safe processed products (smoked and fermented fish) in Cambodia	Dr. MITH Hasika Dr. PHAT Chanvorleak Dr. KHOEUN Kimleang Dr. SROY Sengly Ms. MOM Vattana Mr. LAY Sovannmony	ARES	50000	200000	2022-2027	Contribute to the development of sustainable aquaculture value chains in Cambodia and to improve food safety and nutritional quality of marketed farmed and caught fish products in Cambodia	<ul style="list-style-type: none"> - a strategy to empower a Cambodian sustainable agroindustrial value chain has been implemented and tested at a pilot-scale on fish value chain through the creation of a network of scientists and stakeholders working together with relevant technologies and approaches - Graduation of undergraduate and graduate students (2 Ph.D students) - Staff capacity building
3	Assessment of air quality and impact in potential areas in Cambodia	Mrs. SIENG Sreyvich	JICA/JST	NA	NA	2023-2026	To monitor the air pollutants emitted from various sources in Cambodia and their impact on public health and environment	<ul style="list-style-type: none"> - Staff capacity upgrade - Journal publications
4	Laboratory of Excellence in co-engineering for Sustainable Agrosystems (acronym: LMI LEAD)	Dr. SUONG Malyna (Southern leader) Dr. MOULIN Lionel (Northern leader)	IRD	20000	70000	2024-2028	<ul style="list-style-type: none"> - To promote the “One Health” approach for sustainable rice production in Cambodia - To develop alternative methods contributing to the 	<ul style="list-style-type: none"> • 1 laboratory platform will be established at ITC • At least 2 international journal • At least 3 scientific events will be organized • Capacity building: at least 10 master students, at least 20

		Dr. BELLAFIGORE Stéphane Ms. OEUM Kakada, PhD student					reduction of environmental pollution (incl. pesticides) - To the efficiency of water management - To increase the use of agrobiodiversity approaches in rice production	undergraduate student will be graduated from the project
5	Promoting integrated pest management and sustainability of the fragrant rice quality in Cambodia by valorization of native microbiota (acronym: Healthyrice- FEF)	Dr. SUONG Malyna (ITC leader) Dr. BELLAFIGORE Stéphane (IRD leader) Dr. SENG Vang (GDA/MAFF leader) Dr. TRAN Thi Anh-Dao (Coordinator from the Embassy of France)	Ministry of Europe and Foreign Affairs (via the Embassy of France)	14000	280000	2024-2025	To develop integrated pest management approaches for rice crops with the farmers in order to propose sustainable alternatives based on the use of plant microbiota to guarantee the quality of rice aroma	- 1 Net-house will be established at ITC - Support equipments - Capacity building and networking with policymakers, and relevant stakeholders
6	Training in the use of molecular tools for diagnosis of rice diseases to support the transition towards integrated pest management (Acronym: DiagnoPathoRice)	Dr. SUONG Malyna (ITC leader) Dr. BELLAFIGORE Stéphane (IRD leader)	IRD	1000	3000	2024-2026	To train staffs/research students on the use of molecular tools to diagnosis the rice pathogens	• Capacity building: Staffs and research students will be trained on molecular tools
7	Pesticide Analysis in irrigation water of different rice practices_WAT4CAM	Dr. PHAT Chanvorleak Dr. YOEU Sereyvath	CIRAD-AFD	12000	24000	2024-2025	To investigate pesticide residues in heavy rice production region in Kanhhot, Battambang, and Rovieng, Preah Vihear	- Training/staff capacity building - Reference standard materials - Journal publication - Strengthening network/collaboration
8	The development of functional beverages with improved nutritional and sensorial properties toward	Dr. PHAT Chanvorleak Dr. TAN Reasmey	MoEYS	0	1488000	2025-2029	To develop soy-based drink, mango drink, and fermented drink for commercialization	

	local economic growth through diversifying Cambodia's agriculture products	Dr. MITH Hasika Dr. SROY Sengly Dr. EK Pichmony Dr. THANH Channmuny Dr. HOUNG Peany						
9	Improvement of quality of Kimchi and garlic/ginger in honey	Dr. MITH Hasika	CAPRED & KE	0	8,000	2025	Product quality improvement	

Annex 28. List of Ongoing Projects in MIT in 2024-2025.

No.	Project/Research Topic	Name of Researcher	Fund	Budget 2024-2025	Total Budget	Period	Objectives
1	Integrating the Electrification and Smart Mechanisation of Two-Wheel Tractors with Precision Agriculture for Improved Productivity and Sustainability	Dr. SRANG Sarot (PI) Dr. VALY Dona Mr. KEO Chivorn Mr. SREY Sokserey	ACIAR	16195	200000	2024-2029	The aim of this project is to build the technological and socio-economic foundations for the design, manufacture, and field evaluation of electric and smart two-wheel tractors with precision agriculture capability, aiming to critically evaluate its potential to enhance the sustainability and productivity of Cambodian agriculture.
2	Development of Two Mobile Robots for Joining a Robocon Competition in 2025	Mr. SREY Sokserey (PI) Dr. SRANG Sarot	Takahashi Industrial & Economic Research Foundation	1750	7000	2024-2025	To provide lab members with a real and competitive environment to enhance their robotics skills through the design, development, and deployment of two mobile robots for the 2025 robotics competition.
3	Design and Implementation of Health Monitoring for Older People	Dr. NGETH Rithea (PI) Mr. SUM Rithea	Takahashi Industrial & Economic Research Foundation	3750	5000	2024-2025	To design and implement an affordable health monitoring system for older people living in rural area in Cambodia. Specific objectives are as following. (1) Design and develop an affordable ECG monitoring system; (2) Design a user interface; (3) Design an uploading data protocol to a cloud server.
4	Autonomous Land-Leveling Robot Tractor	Dr. SRANG Sarot (PI) Mr. TANG Sou Bun	Ministry of Agriculture, Forestry and Fishery	5000	20000	2024-2025	Develop a robot tractor capable of autonomously or semi-autonomously leveling agricultural land.
5	User Identification through Online Khmer Handwriting Analysis Using Deep Learning	Dr. VALY Dona (PI) Mr. NGIN Kimlong	JICA LBE INACON	3400	13,812	2025	The research aims to create a Khmer online handwriting dataset, develop a deep learning model for handwriting analysis, and build prototype applications for user authentication and script learning.
6	Investigation of configuration issues related to SDN/NFV deployments	Mr. KUY Movsun	ARES	2000	80000	2020-2024	(1) Experiment with NFV deployment on resource constrained datacenter. (2) Experiment with NFV deployment across federated networks.
7	The vehicle as an intelligent thing	Mr. CHIN Chan Daraly		N/A	N/A	2022-2025	Transforming the role of the vehicle into an active and intelligent actor on the road by exploiting these sensing, computing and communication capabilities for making the transportation people and goods safer, more efficient, greener and more entertaining.

8	Integrated Decision Support System for Non-Communicable Ocular Diseases using Machine Intelligence	Dr. Wan Mimi Diyana Wan Zaki (UKM) Dr. VALY Dona	ASEAN IVO	16068	22016	2023-2024	<p>1. Development of the Decision Support System to screen anterior segment-related NCODs using ASPIs captured using smartphone cameras.</p> <p>2. Development of machine intelligence models with the best classifier that provides the highest classification and prediction accuracies to detect identified anterior segment NCOD</p> <p>3. Societal, health and well-being impact analysis with the underprivileged old folks and rural communities</p>
9	"Kayvika" Khmer Sign Language Translation	Mr. CHOU Koksai LANG Bandithvipho	Khmer Enterprise	750	1500	2024-2026	The research aims to create a two way sign language translation application. The app will translate from Khmer voice to sign language and will translate from sign language to Khmer voice.

Annex 29. List of Ongoing Projects in MSS in 2024-2025.

N o.	Project/Research Topic	Name of Researchers	Fund	Budget 2024-2025	Total budget (USD)	Period	Objectives	Outputs
1	Enhanced Durability and Sustainability of Asphalt Concrete through Waste Plastic Recycling	Dr. Kuchvichea KAN, PI Dr. Phanny YOS, Co-PI	JICA-LBE	~ 9,000	14,950	2025 - 2026	1. Developing Modified Emulsion Asphalts using recycled waste plastic and waste oil. 2. Developing cold-mixed asphalt concrete that incorporates recycled plastic pellets, providing a sustainable, climate-resistant pavement material	- Conference and journal publications - Bachelor and master students graduated - Develop and modify emulsion with plastic (knowledge)
2	Hybrid Coatings For The Photodynamic Inactivation Of Microbial Infections	Mrs. AUN Srean Prof. YANN Molard Assoc. Prof. Dr. Marian Amela-Cortes Asst. Prof. Dr. YOS Phanny	BGF-MoEYS	~ 9,000	42,500	2024 - 2027	1) to design and characterize the robust innovative multi-component combination for antimicrobial disinfection under visible light irradiation	- PhD thesis - Publications - Collaboration
3	Climate-resilient soil stabilization in cambodia's SUBGRADE: adapting to the challenge of flooding and seasonal variations.	Mr. Nuth Visal Prof. Olivier CUISINIER, (Supervisor, UL) Dr. KAN Kuchvichea, (Supervisor, ITC)	BGF-MoEYS	~ 3,500	42,500	2024 - 2027	1) to pinpoint challenges of flooding and variation in temperature of mechanical property. 2) to enhance the soil subgrade in response to Cambodian seasonal challenges	- PhD thesis - Publications - Collaboration
4	Natural Rubber Latex Powdered Gloves for Medical applications	Dr. Yos Phanny Ms. Sreng Laymey	Takahashi	380	4990	2024 - 2025	- Produce examination powdered gloves from natural rubber latex - Examine antimicrobial effect biofillers such as pomelo, mangosteen, ginger, and sugarcane bagasse on latex gloves	- 4 undergraduate theses - Possible 1 journal paper - Poster presentation in 1 international conference

5	Evaluation technico-socio-économique des infrastructures routières au Cambodge	Dr. Phun Veng Kheang Dr. HAN Virak Dr. KAN Kuchvichea	ARES	~25,000	80,000	2023 - 2025	Geological and geotechnical hazards linked to road infrastructure in Cambodia The quality of current road infrastructure in Cambodia The effect of the quality of road infrastructure on the socio-economic development of Cambodia	- Conference and journal publications - Master and PhD students graduated - Transfer knowledge - Policy recommendation
6	SATREPS Project: « Establishment of Risk Management Platform for Air Pollution in Cambodia, “Air sampling and traffic”	Mrs. AUN Srean Mr. PLACK Sokhit	JST-JICA	1,500	4,500,000	2022 - 2027	- Air sampling for: 1. Residential 2. Industry 3. Urban 4. Landfilled - Air pollution due to traffic	- Journal publications, - Research equipment, - Capacity building for students and researchers
7	Effect of The Addition of Natural Fibers on Shrinkage, Cracking Risk and Healing Capacity of Cementitious Materials	Mr. SOM Chansamnang	BGF-MoEYS	8,019	32,076	2023 - 2026	- Valorize natural, local and renewable products and reduce the CO ₂ emissions comparing to the production of classic fibers - Produce self-healing capacity in cementitious materials by natural fibers as a reservoir - Limit crack and improve mechanical properties of cementitious materials - Reduce construction cost and building maintenance - Increase lifespan of structures	- PhD thesis - Publications
8	Managing the collaboration between architect, structure, and MEP in service of construction 4.0: ITC's workshop case	Ms. KETH Kannary	ARES	22,500	102,000	2020 - 2025	The objective of this research: -To understand the multi-disciplines collaboration (architecture, structural, and MEP) in Cambodia's current construction stage. -To identify the difference of the guideline/protocol BIM in the European context.	- PhD Thesis - Conferences - Journal papers

							-To propose the guideline/protocol BIM aligned with the Cambodian context. -To propose the integration of BIM training in Architectural engineering students in Cambodia.	
9	Sustainable building designs integrated life-cycle assessment (LCA), for best strategies to design the green residential building in Phnom Penh, Cambodia	Mr. LONG Makara	ARES – COMBOd IA Project	22,500	102,000	2021 - 2025	Analyze building LCA towards green residential building design by integrating the sustainability aspect to propose design strategy and guidelines to reduce the carbon footprint and overall environmental impact of building	- PhD Thesis - Conferences - Journal papers
10	Energy-based design for buildings and Steel ring damper for seismic application	Dr. DOUNG Piseth	KMUTT	1,000	20,000	2020 - 2025	To develop a new steel damper To assess the cumulative seismic energy in buildings To develop an energy-based seismic design method for buildings	- Conference and journal publications - New seismic steel dampers are developed - New seismic-based design is developed
11	Experimental and Numerical Studies of the Behavior and Durability of Foam Concrete Based on Recycled Glass and Natural Fibers	Mr. CHANN Socheata	Eiffel-MoEYS	12,500	50,000	2024 - 2027	To investigate the behavior of concrete with recycled glass and natural fibers	– PhD Thesis – Conferences – Journal papers

Annex 30. List of Ongoing Projects in WAE in 2024-2025.

No.	Project/Research Topic	Name of Researchers	Source of Funding	Budget 2024-2025	Total budget (USD)	Period	Objectives	Outputs
1	SATREPS: Establishment of Risk Management Platform for Air Pollution in Cambodia	Dr. OR Chanmoly Dr. PENG Chanthol Dr. KHOEURN Kimleang Ma. HANG Leakhena	JST/JICA	500000	5000000	2022-2027	To contribute to the creation and establishment of a safe and comfortable living environment from the viewpoint of air pollution, essential for the sustainable development of tourism, which leads to economic benefits to the Cambodian people and to creation of a far better and comfortable environment for residents and tourists from all over the world.	<ul style="list-style-type: none"> - Second JCC conducted on September, 2023 - Sampling training was conducted by KU postdoctoral research to students at ITC - Researcher capacity building training were conducted in Japan between July-August, 2023. - Weekly, and monthly meeting have been conducting to update each group progress, discussion, and planning - Several abstract presented and going to present in International Conference.
2	Preventing zoonotic diseases emergenc	Dr. THENG Voulay Dr. PENG Chanthol Dr. Ann Vannak Ms. CHANTO Monychottepy	EU/AFD	0	0	2022-2027	To study risks of emergence of zoonotic diseases impacted by the hydrological dynamics, climate, and environment in diversified ecosystems in Cambodia	<ul style="list-style-type: none"> - Impact of hydrological factor on antibiotic resistant bacteria

3	Photoproduction of radicals and their effects on carbon dynamics in tropical lakes (JSPS-Photochem)	Dr. THENG Vochlay Dr. PENG Chanthol Dr. SANG Davin	JSPS	0	700	2023-2027		<ul style="list-style-type: none"> - Kick off meeting was conducted on October, 2023 - Primary sampling and experiment will be conducted in March, 2024
4	SATREPS: development and social implementation of greenhouse gas emission reduction technologies in paddy fields of west tonle sap lake by establishing a large paddy area water management system	Dr. SOK Ty Dr. SONG Layheang Dr. Peng Chanthol Dr. Ket Pinnara	SATREPS/JST/JICA	150000	250000	2024-2028	Preparation to launch in April 2024	<ul style="list-style-type: none"> - Manuals on the intermittent irrigation and drainage systems
5	Integrated River Basin Management of the Mekong Basin Tributary for Adaptation to Climate Change	Dr. SOK Ty Dr. SONG Layheang Dr. OEURNG Chantha	Mekong Korea Cooperation Fund (MKCF)	130000	380000	2024-2027	<ul style="list-style-type: none"> - Identify flood hazards through field-based and modeling approaches by integrating extensive update datasets (hydrology, climate, land use, water quality, infrastructure) and strengthening community resilience. - Assess soil erosion and water quality to identify sustainable river basin management measures. 	<ul style="list-style-type: none"> - Improve flood resilience and reduce damage and loss for social and economic development in the river basin. - Strengthen the watershed management under climate and land-use change pressure by integrating natural base solution (NBS). - Enhance policy direction in sustainable watershed management from the

							<ul style="list-style-type: none"> - Introduce nature base solution (NBS) into watershed management for improvement of flood risk and soil loss and biodiversity within the river basin. - To build capacity for integrated river basin management at the national and sub-national levels. - To develop and mainstream the policy brief for multi-stakeholders from the sub-national to the national level. 	national to the sub-national level.
6	Addressing Water Scarcity through Groundwater Use: Development of Solar-Powered Groundwater Treatment System for Remote Area of Cambodia	Dr. BUN Saret Dr. HAM Phally	MTT-RRP	33000	33000	2024-2025	(i) preliminary assessment including groundwater quality assessment as an input data for treatment technology design and social survey for assessing the demand and perspective of the target end users of the newly developed water treatment unit, (ii) optimization of groundwater treatment process in terms of treatment performance and power consumption, and (iii) evaluation the operation performance of prototype system in the real scale community.	
7	Laboratory of Excellence in co-engineering for Sustainable	Dr. SUONG Malyna (Dr. EANG Khy Eam is one of work	IRD	12200	52000	2023-2028	<ul style="list-style-type: none"> - Reducing environmental pollution (incl. pesticides) - Better water management - Increased use of agrobiodiversity 	Kick off meeting of project has not yet been conducted

	Agrosystems (LMI-LEAD)	package leader)					<ul style="list-style-type: none"> - Promotion of the "One Health" approach - Improving food security 	
8	Réhabilitation et gestion durable de la fertilité des sols pour une agriculture durable et résiliente au Cambodge (ReaSol)	Dr. Ratha MUON; Dr. SONG Layheang	IRD	40000	130000	2023-2025	<ul style="list-style-type: none"> - To improve understanding of socio-economic and environmental factors impact on soil fertility; - To identify and promote innovative agricultural practices for soil rehabilitation and improve of the farmer livelihood 	
9	Establishment of Sustainable Groundwater Management Platform in the Lower Mekong Region	Dr. EANG Khyeam	Mekong-Republic of Korea Cooperation Fund (MKCF)	0	499647	2025-2028	<p>To develop a Comprehensive Groundwater Database to track and analyze groundwater changes annually, serving as a benchmark for sustainable management in the Lower Mekong Region.</p> <p>To promote Regional Collaboration among Mekong countries and the ROK for Adaptive Groundwater Governance, integrating multi-year trend analysis into cross-border policy frameworks and capacity-building efforts.</p>	<p>Output 1: Pilot Testing in Key Locations & Capacity-Building</p> <p>Output 2: Development of a Groundwater Management Model for Policy Recommendations and training</p> <p>Output 3: Established Physical Information Center and Interactive Online Platform for Groundwater Management in the Mekong Region & Stakeholder Engagement</p>
10	Establishing an Evidence-based National Adaptation Plan (NAP): National Climate Report	Dr. SOK Ty Dr. SONG Layheang Dr. KET Pinnara Mr. HOUT Meng Hour	Ministry of Environment (GREEN CLIMATE FUND)	60000	60000	2024-2025	To analyze climate data and write a National Climate Report for Cambodia	

11	Sustaining the shared groundwater resources of the Transboundary Cambodia-Vietnam Mekong River Delta aquifer under climate change impacts through Strategic Gender equality, disability, and social inclusion (GEDSI) tools and suitable Nature-based Solution (SAGA)	Dr. PEN Sytharith, Dr. SANG Davin	SEI	5000	5000	2024-2025	<p>-Enhance resilience in the face of climate change by integrating energy, food, and water nexus</p> <p>-Gender mainstreaming in groundwater resources management</p>	Provide base line and existing policies and planning in groundwater management in Cambodia; Synthesis stressors from climate and human factor in groundwater management
12	Evaluation of Nature-based solutions for the enhancement of urban water security in South-East Asian Cities	Dr. PEN Sytharith Dr. HEU Rina	APN	8000	8000	2024-2025	<p>Access water supply and demand scenario of the Phnom Penh city of Cambodia.</p> <p>Identify feasible nature-based solution to enhance urban water security for drinking water and industrial water uses.</p> <p>Assess environmental and socio-economic impacts of the feasible NBS using water case study.</p>	<p>Using PCSWMM Model to set up the urban water profile</p> <p>Apply Nature-based solution scenario to assess water availability and water using in the urban area</p>
13	Anticipating the inversions of the Tonle Sap river (INVERSAP)	Dr. DUONG Ratha Dr. Paul Baudron, Dr. Ratha Doung,	IRD	10000	100000	2024-2025	Anticipating the inversion of the Tonle Sap river through collaborative sampling.	<p>- Isotopic balance of Tonle Sap Lake</p> <p>- River-scale survey (sampling+DGPS)</p> <p>- Water supply authorities: data acquisition, collection</p>

		Dr. Khy Eam Eang, Mr. Sambo Lun, Dr. Sytharith Pen, Mr. Vuthy Chork, Dr. Sylvain Massuel Mr. Jonathan Van Hanja Dr. Kong Chhuon						and treatment - Confluence sampling and ADCP measurements - Hydrodynamic modelling + ADCP measurements
14	ECOsysteM services derived from TERmite mounds in the lower Mekong basin (in Cambodia and Laos) (ECOTER)	Dr. MUON Ratha Dr. MUON Ratha Dr. Pascal Jouquet Dr. Sochan Sao, Dr. Vannak Ann, Dr. Pinnara Ket	ANR, France	15000	565000	2023-2027	- To identify and quantify ecosystem services (ES) provided by TM in LMB - To identify the environmental and socio-economic dynamics that condition their preservation by stakeholders and - To consider solutions based on the management and use of TM to meet the needs of populations (health, food...) in LMB.	WP1: Abundance and utilization of Termite mounds (TMs) by the population WP2. TM properties WP3. Crop growth and resistance WP4. Food security and human health WP5. Economic assessment
15	Development of IR technologies, and distribution of C in Chrey Bak catchement (FairCarbon)	Dr. MUON Ratha Dr. Pascal Jouquet	ANR, France	0	120000	2022-2028	To develop IR technologies to estimate C sequestration	- Soil analyse (pH, EC, PS, and C) - Training modeling, INFRARED
16	Research collaboration on sustainable water	Mr. SOK Kimhuy	NAPV	12000	12000	2024-2025	1. Planning atlas; 2. Hydraulic infrastructure system; 3. Water resources utilization; 4. Natural	Flow measurement in the Stung Rongea River

	resources management in Koh Ker heritage site	Mr. Chork vuthy, Dr. Heng Sokchhay, Chhoun Kong					disasters; 5. Catchment development plans	
17	Restoration of the Preah Vihear Temple's Gopura V (Phase II)	Mr. SOK Kimhuy Mr. Chork vuthy, Dr. Heng Sokchhay, Chhoun Kong	NAPV	51500	51500	2024-2025	1. Seismic survey; 2. Hydrological study; 3. Geotechnical study; 4. Technical presentation and meeting at province -	Groundwater monitoring; weather station installation; LiDAR survey.
18	Mutual learning toward just-in-time information for grassroots climate adaptation in the lower Mekong countries	Dr. PENG Chanthol Ms. DOEURN Seyha; Dr. THENG Vouchlay	Toyota Fondation	4500	60000	2024-2026	Understand best practices of people along the Mekong River toward climate change adaptation for hydrological change of the Mekong River (water level change and local adaptation) and share the knowledge between Thailand and Cambodia	- Workshop of knowledge exchange - Video of the best practice behavior and information sharing

Annex 31. List of Completed Research Projects in 2024-2025 of ETM Unit.

No.	Project/Research Topic	Name of Researcher	Fund	Budget 2023-2024	Total budget (USD)	Period	Objectives	Outputs
1	Development of a Virtual Cambodian Power System- Towards an Innovation Micro-Grid in Cambodia	Dr. Vai Vannak Ms. Eng Samphors Dr. Bun Long Mr. Eth Oudaya Mr. Khon Kimsrornn Mr. Chhith Chhlonh	HEIP	24824	390800	2020-2024	1) To develop tools for distribution system architectures 2) To develop tools for microgrid architectures 3) To develop tools for self-healing operation of distribution systems and microgrids 4) To set-up a testbed for distribution system and microgrid	1) Upgrade three ITC staffs from master to Ph.D., 2) At least four master students will graduate 3) At least five international peer-reviewed journals will be published 4) At least ten international peer-reviewed conferences will be published 5) A testbed platform at ITC
2	Optimal Fault location Isolation, and restoration procedure for LV microgrids.	Mr. Chhloh Chhith Dr. VAI Vannak Prof. RAISON Bertrand Assoc. Prof. ALVAREZ-HERAULT Marie-Cécile	French Government Scholarship (BGF)	19650	28584	2021-2024	<ul style="list-style-type: none"> To develop an algorithm for microgrid topologies planning with various options (i.e. AC, AC/DC, and DC). To develop an algorithm to make the system self-healing operation include fault location, insolation, and restoration (FLIR) integrate with PV. 	<ul style="list-style-type: none"> 2 international journals 3 international conferences (1 published, 2 writing)

3	Optimal energy-management system in smart-building	Dr. KHON Kimsrornn Mr. SORN Darong Mrs. ENG Samphors Ms. MIN Taingliv Mr. LIM Phing	JICA-LBE	14149	14149	2023-2024	<ul style="list-style-type: none"> - TO develop an algorithm for the energy efficiency in the smart building - To develop a prototype of the energy management in the smart building tools 	1) Two undergraduate students will graduate under this project2) Three international peer-reviewed conferences will be published
4	The Optimization of Algae Cultivation for Biofuel Production in Cambodia	Dr. OR Chanmoly Mr. HENG Ratha Dr. ENG Chandoeun Dr. YOEU Sereyvath Ms. PECH Sopheap Ms. SIO Sreymean Mr. KONG Sela	JICA-LBE	14985	14985	2023-2024	<ul style="list-style-type: none"> - To identify the ultimate conditions suitable for Cambodia and types for cultivating algae toward the biofuel production. - To extract the biofuel from the cultivated algae 	1) Two bachelor students are graduated 2) Two conference papers are submitted 3) One article journals submission/publication 4) Three students (4th -years students) will use the project data to write the internship report

Annex 32. List of Completed Research Projects in 2024-2025 of FTN Unit.

No.	Project/Research Topic	Name of Researchers	Fund	Budget (2023-2024)	Period	Objectives	Outputs
1	ASEAN Network for Green Entrepreneurship and Leadership/ ANGEL	Dr. YOEUN Sereyvath Ms. NET Marinich	Eramus +	50685	2021-2024	Green entrepreneurship and leadership	- IT equipment - Training/staff capacity building - Staff mobility - Strengthening network/collaboration
2	Impact of initial composition and processing techniques on aromatic quality of mango	Ms. CHIN Lyda Dr. MITH Hasika Dr. HOR Sivmey	BGF & MoEYS	NA	2021-2024	To identify the biochemical composition (volatile compounds and aroma precursors) of three contrasted cultivars at three ripening stages before and after each processing (drying, puree, and vacuum frying)	- Staff capacity upgrade - Journal publications
3	HEALTH OF PLANTS IN THEIR SOCIO-ECOLOGICAL ECOSYSTEM (Plant Health)	Dr. SUONG Malyna Dr. MOULIN Lionel Dr. BELLAFFIORE Stéphane	Agropolis Fondation	30000	2022-2024	To explore the root microbiome of rice in Cambodia and exploit root-associated bacteria as biofertilizers for rice plant	-Joint indexed publications - Staff capacity building - Equipment and consumable
4	Deciphering the function of the plant parasitic nematode microbiome in suppressive soils (DEPPAS)	Dr. SUONG Malyna Dr. BELLAFFIORE Stéphane Mr. BARBIER Michel (PhD student)		15100	2022-2024	The overall objective is to decipher the plurality of interactions between a soil pathogen, the plant and soil microorganisms in different ecosystems with the aim of searching for microorganisms that may play a role in biocontrol	- Joint Indexed publications with ITC affiliation - Consumables and lab supports - Networking for further research proposals
5	Improving fresh-water fish powder production for versatile use in Cambodian diets	Dr. IN Sokneang Dr. SROY Sengly Ms. HOEUN Seanghai	CAPFish-UNIDO-EU	20000	2023-2024	The development of fish processing solutions with the aim to improve the nutritional performance and efficiency of fish processing technologies, including relevant food safety aspects. This project will therefore contribute to the further development of a	- Graduation of undergraduate students - Lab equipment - Staff capacity building - SME collaboration - International conference

						sustainable freshwater fish-based food system in Cambodia	
6	Improvement of Dried Fish Quality through Drying Technology Development	Dr. HOUNG Peany Dr. EK Pichmony	CAPFish-UNIDO-EU	20000	2023-2024	To compare different drying technologies and identify the one which is suitable for obtaining good quality of dried fish products with an acceptable production cost in Cambodia context	<ul style="list-style-type: none"> - Graduation of undergraduate students - Lab equipment - Staff capacity building - SME collaboration
7	Development of Instant Fish Soups for Commercialization	Mr. KONG Sela Dr. TAN Reasmey	CAPFish-UNIDO-EU	20000	2023-2024	To innovate 3 different instant fish soup products that will be formulated from our Khmer traditional dishes, such as Somlor Broheu Trey, instant Ngam Ngov Trey, and Khor Trey	<ul style="list-style-type: none"> - Graduation of undergraduate students - Lab equipment - Staff capacity building - SME collaboration - Internation conference
8	Development of nutrient-dense waffle rolls for children by incorporating Cambodian freshwater fish powder	Dr. EK Pichmony Dr. SROY Sengly	CAPFish-UNIDO-EU		2023-2024	To focus on the development of the waffle rolls containing fish powders from two fish species	<ul style="list-style-type: none"> - Graduation of undergraduate and graduate students - Lab equipment - Staff capacity building - SME collaboration
9	Shelf life improvement and development of fish Jerky products	Dr. MORM Elen Dr. SROY Sengly Dr. MITH Hasika	CAPFish-UNIDO-EU	10000	2023-2024	To improve the shelf life of dry fish Jerky and to develop a ready-to-eat fish Jerky product	<ul style="list-style-type: none"> - Graduation of undergraduate students - Staff capacity building - SME collaboration
10	Production of Organic-mineral Fertilizers from Local Raw Materials	Dr. YOEN Sereyvath	MoEYS	20000	2023-2024	<ol style="list-style-type: none"> 1. Optimization and production of potassium humate from local raw materials (brown coal and peat) by adapting the cavitation technology. 2. Formulation and production of organic-mineral fertilizers for Cambodian agriculture based on humates. 	<ul style="list-style-type: none"> -Fertilizer analysis methods are developed -Graduation of undergraduate students - Staff capacity building -Scientific manuscript
11	Development of oyster sauce from Cambodian oysters and green mussels for commercialization	Dr. TAN Reasmey	CAPFish-UNIDO-EU	15000	2023-2024	To develop oyster sauce from Cambodian oysters and green mussels for commercialization.	<ul style="list-style-type: none"> - Reduce the cost of raw material as well as the final product by mixing green mussels with oysters as green mussels are very much cheaper than oysters;

							<ul style="list-style-type: none"> - Oyster sauce made by using Cambodian fresh oysters and green mussels is first produced in Cambodia instead of importing ingredients from abroad to make oyster sauce; - Provide the technology transfer to Phnom Pich BunKhea Fish Sauce Enterprise for commercialization in order to promote the economic growth of fishery sector in Cambodia; - Oyster sauce produced can replace some commercial oyster sauces and sell in the supermarkets; - Research members and students gain the knowledge in doing research on fishery products
12	Health risk assessment and quality improvement of Cambodian smoked fish	Dr. MITH Hasika	CAPFish-UNIDO-EU	14900	2023-2024	<ol style="list-style-type: none"> 1. Survey for health risk assessment & current practice 2. Develop analytical method for PAHs analysis 3. Assess of PAHs contaminants in smoked fish 4. Propose modified processing technique to reduce PAHs levels 	<ul style="list-style-type: none"> - Database of smoked fish consumption behaviour of different categories of consumer - Database of common practice and perception of local processors - Database of health risk assessment of carcinogenic PAHs (PAHs level) - Standard method for PAHs analysis - Updated new method/technique to enhance the quality of smoked fish - Graduation of undergraduate students - Scientific manuscript

							- SME collaboration
13	Improvement on quality, safety, and shelf-life (including packaging) of fermented Pangasius fish for accessing to new markets	Dr. IN Sokneang Ms. HOEUN Seanghai	CAPFish-UNIDO-EU	7220	2023-2024	<p>1. Improvement fermented Pangasius fish processing by using different food additives.</p> <p>2. Study on different packaging such as bottle, plastic bottle, seal bag packaged and vacuum packaged to extension of shelf-life of the fermented Pangasius fish product and improvement of the quality stability.</p> <p>3. Produce quality control guideline for fermented Pangasius fish processing</p>	<p>- Hygienic Practice Guideline and check list (5S and GHP) for fermented Pangasius fish production</p> <p>- Improve Fermented Pangasius fish products ready for new market</p> <p>- Graduation of undergraduate students</p> <p>- Scientific manuscript</p> <p>- SME collaboration</p>
14	Feasibility study of Siem Reap's Prahok toward Geographical Indication: History, technology, and quality	Dr. PENG Chanthol Mr. HENG Oudam	CAPFish-UNIDO-EU	15000	2023-2024	<p>To characterize Siem Reap's Prahok in relation to a geographical indication (GI) with a focus on three key criteria of GI, namely the history, technology, and quality of Prahok produced in Siem Reap and compare with that of Battambang's</p>	<p>- A report of Prahok's history, technology including process involve, raw material, etc. for the Siem Reap's Prahok that can be used for applying for GI certificate;</p> <p>- A scientific evidence based on the distinguished characteristic of Siem Reap's Prahok in term of microbial community involved in fermentation of the Prahok as may contribute to the differentiation of unique product quality of Siem Reap's Prahok compare to other provinces.</p> <p>- A conclusion on the characteristic of Siem Reap's Prahok for the GI certificate and recommendation.</p> <p>- Graduation of undergraduate students</p>

							- SME collaboration
15	Study on the effect of steam conditions (temperature, time, and green mussel size) on the organoleptic quality and safety quality of green mussels	Dr. IN Sokneang Ms. HOEUN Seanghai	CAPFish- UNIDO-EU	10723	2023- 2024	To study on the different steaming conditions, especially temperature and time and green mussels' size to produce the steam green mussels with good quality (especially organoleptic quality) and safety	- Development proper steam conditions for green mussels to meet market standards - Guideline on steam procedure and storage conditions for green mussels - Graduation of undergraduate students - Scientific manuscript - SME collaboration
16	Soil-borne legacy and microbiota-mediated disease resistance in rice-based systems in Cambodia (acronym: MiMeDiR)	Dr. SUONG Malyna (ITC leader) Dr. MOULIN Lionel (IRD leader) Ms. JOBERT Léa (PhD student)	Agropolis Fondation	10000	2024	<ul style="list-style-type: none"> To understand the influence of a plant's phytosanitary status on its root microbiome, and to search for a specific signature of the plant's "good health" To identify the effects of "soil born legacy" on plant protection against pathogens to understand the links between microbial diversity, agronomic practices including the use of cover crops in the off-season, and the induction of better plant resistance to pathogens. 	<ul style="list-style-type: none"> At least 1 international journal Capacity building
17	Reducing Foodborne Pathogen Contamination of Vegetables in Cambodia: Innovative Research, Targeted Interventions, and Impactful, Cambodian-Led Engagement	Dr. PENG Chanthol Mrs. CHANTO Monychot Tepy Mr. HENG Oudam	USAID		2020- 2024	To reduce the prevalence and incidence of foodborne pathogen contamination of vegetables produced and sold in Cambodia	- Strengthen collaboration with local and international research institute - Capacity building of researcher - Human resource development through involvement of Engineering and Master students in the project

Annex 33. List of Completed Research Projects in 2024-2025 of MIT Unit.

No.	Project/Research Topic	Name of Researcher	Fund	Total Budget	Period	Objectives
1	Smart Mushroom Control System Development	Mr. TEP Sovichea (PI) Mr. CHHORN Sopheaktra Mr. PROEUNG Bunrong	iDE	82,000	2023-2024	<ul style="list-style-type: none"> - Setup mushroom houses at ITC for straw and oyster mushroom growing process - Set up a controlled environment for growing mushroom - Develop mushroom control system - Estimate the final specifications of sensing and control system including costs, capacity of control
2	Development of autonomous and semi-autonomous mobile robots to participate in Robocon 2024	Ms. OUM Sotheara Dr. SRANG Sarot	Takahashi Foundation	3,750	2023-2024	Producing omnidirectional mobile robots with (semi-) autonomous capabilities for educational purposes as well as joining ABU Robocon 2024.
3	Development of APSARA-1 (2U CubeSat) Engineering Model	Dr. SRANG Sarot Mr. SREY Sokserey	MoEYS	60,000	2022-2024	To capture an image and transmit the data to the ground station.

Annex 34. List of Completed Research Projects in 2024-2025 of MSS Unit.

No.	Project/Research Topic	Name of Researchers	Fund	Budget 2024-2025	Total budget (USD)	Period	Objectives	Outputs
1	Development of Starch Based Film for Biodegradable Packaging Using Cambodian Cassava as Starch Source	Mrs. AUN Srean Mrs. Nat Yukliv	Takahashi	1975	3975	2023-2024	The purpose of this research study is to develop cassava starch-based film. Three different types of cassava starch based-film will be studied and compared its properties, which are native cassava starch film, acid hydrolysis of cassava starch film, and cassava starch/Poly Lactic Acid (PLA) film	<ul style="list-style-type: none"> - Publications - Students will graduate
2	Green BIM - Analysis of BIM approach for designing a bioclimatic building	Ms. TAING Kimnenh	ARES	22500	102000	2020-2024	<ul style="list-style-type: none"> - Find bioclimatic design to achieve thermal comfort in building specific in tropical region by using BIM as instrument - BIM to facilitate at the early stage of this design process to avoid certain conflicts between architect and engineer - Perspective of application of BIM and Bioclimatic design in AEC sector in Cambodia 	<ul style="list-style-type: none"> - PhD Thesis - Conferences - Journal papers
3	Performance of Tyfo(R) FibrAnchor under axial load	Dr. PROK Narith Dr. RATH Sovann Sathya	Fyfe Asia	7000	7000	2023-2024	<p>To investigate the pull-out behavior of FRP Anchor using experiment</p> <p>To investigate the pull-out behavior of FRP Anchor using simulation</p>	<ul style="list-style-type: none"> - Publications - Students will graduate - Knowledge transfer
4	Investigation of Steel-Concrete Composite Structural Elements under Various Loadings	Dr. OEUNG Thaileng	TMU	15500	15500	2024-2025	<ul style="list-style-type: none"> - To investigate the smart high-performance concrete materials 	<ul style="list-style-type: none"> - Conference and journal publications - Staff capacity building

5	ERASMUS KA-171 (French Partners): Capacity building on Materials Engineering	Dr. YOS Phanny	Erasmus	-	-	2023- 2025	Capacity building of ITC staff in Materials engineering field	Staff capacity building
6	Experimental Identification of Hardening Behavior of G300 Steel Grade	Dr. CHHIT Saosometh	JICA-LBE	-	15000	2023- 2024	- Define another quality control technique for the raw materials to be made construction pipe.	- 2 undergraduate theses - possible 1 journal paper

Annex 35. List of Completed Research Projects in 2024-2025 of WAE Unit.

No.	Project/Research Topic	Name of Researchers	Source of Funding	Budget 2024-25	Total budget	Period	Objectives	Outputs
1	Development of Eco-Friendly Microplastic Removal Filters from Seawater for Sea Salt Farms in Cambodia	Dr. THENG Vouchlay Ms. DOEURN Seyha, Mr. HENG Oudam, Dr. PENG Chanthol, Mr. PHUONG Sovathana	UNDP	39000	39000	2024-2025	The main objective of the project is starting a pilot EMRF for the first microplastics (MPs) removal from seawater for salt farm in Cambodia, and raise awareness among the people about the risk of consuming microplastics through the food chain	Eco-friendly microplastic removal filters are installed at sea salt farm
2	Development of Electrocoagulation-Floataion (ECF) Reactor for Removal Turbidity, Color, and Oil & Grease from Slaughterhouse Wastewater	Dr. SANG Davin	LBE/JICA	0	15000	2023-2024	Development of Electrocoagulation-Floataion (ECF) Reactor for Removal Turbidity, Color, and Oil & Grease from Slaughterhouse Wastewater	<ul style="list-style-type: none"> - Develop a prototype of Reactor system for treatment slaughterhouse wastewater - Field visit to slaughterhouse and ground water sampling - National journal Kimlay Ngorn, Saret Bun, Davin Sang, Phaly Ham, Rathborey Chan (2023), Groundwater quailty assessment towards sand filter modification for a rural community of Cambodia, 2023. Techno-Sciences Research Journal (accepted). - Join international conference Saret Bun, Davin Sang, Phally ham, rathborey Chan (2023), Microplastics in the Mekong river

								<p>of Cambodia. " A sustainable Natural and Engineered water systems Management conference, December 13-16 at Patumwan Princess hotel, Bangkok</p> <ul style="list-style-type: none"> - one poster <p>Pisey Phorn, Sakada Peov, Sreylim Eang, Phaly Ham, Rathborey Chan, and Saret Bun (2023). Optimization of aerated electrocoagulation-flotation process for color turbidity, and oil removal from synthetic slaughterhouse wastewater's 12TH SCIENTIFIC DAY, June 8-9, 2023, Phnom Penh, Cambodia.</p> <ul style="list-style-type: none"> - 3 engineering students graduated - 1 master student is now conducting his research in the first year.
3	Development of locally-produced ceramic pot filter for household groundwater purification in rural Cambodia	Dr. Rina HEU	LBE/JICA	0	15000	2023-2024	To develop hybrid ceramic pot filter combined with coconut shell based granular activated carbon for metal removal in natural groundwater	<ul style="list-style-type: none"> - Fieldwork for groundwater collection - Groundwater quality testing - Field visit to private water supply operator - Develop hybrid ceramic pot filter - Publication: Leng, B., Wai, M. P., Menh, L., Si, C. I., & Heu, R. (2023). Groundwater Purification Using Bio-Sand Filter Modified with Iron Oxide-Coated Sand and Activated Carbon. Key

								Engineering Materials, 972, 79-88.
4	Development of monitoring and controlling of IoT based aquaponics system using green energy (Acronym: smart aquaponics project)	Dr. TY Boreborey Dr. KET Pinnara	LBE/JICA	15000	15000	2023-2024	Development of monitoring and controlling of IoT based aquaponics system using green energy.	Perform pre-trail of the system including water quality control, and sea water formulation
5	Stopping Macro- and Microplastic Pollutants by Installing Solar-Powered Air Bubble Screening (SBS) Device at Discharge Wastewater Canal to the Sea of Sihanoukville, Cambodia	Dr. BUN Saret Dr. HAM Phally	UNDP	0	18000	2024	To reduce both macro- and microplastic pollutions in the sea, installing the barrier at the discharge wastewater canal could be the effective and applicable concepts. Therefore, the present project aims to develop the innovative approach to block macro- and microplastics before entering the sea by using solar-powered air bubble screening (SBS) device installing at the discharge wastewater canal in Sihanoukville of Cambodia.	
6	Rural Community Training on Safe Water Quality and its On-site Demonstration Testing	Dr. BUN Saret Dr. HAM Phally	SUMERNET	0	5000	2024	The objective of the present activity is to provide a training and on how to define the safe water and information of health effect of drinking untreated water as well as to demonstrate the scientific measurement of on-site water use to notify that not all clear water can be drunk (e.g. using alcohol as a clear liquid but cannot be drunk). The activities will be conducted at the community scale through various instruments including lecture slide, printed document in local language, poster, actual experiment of water	-

							quality measurement and health effect. Different communities around Tonle Sap River will be designed for the activities.	
7	Development of Electrocoagulation-Floatation (ECF) Reactor for Removal Turbidity, Color, and Oil & Grease from Slaughterhouse Wastewater	Dr. SANG Davin	LBE/JICA	0	15000	2023-2024	Proposal accepted	<ul style="list-style-type: none"> - Develop a prototype of Reactor system for treatment slaughterhouse wastewater - Field visit to slaughterhouse and ground water sampling - National journal Kimlay Ngorn, Saret Bun, Davin Sang, Phaly Ham, Rathborey Chan (2023), Groundwater quality assessment towards sand filter modification for a rural community of Cambodia, 2023. Techno-Sciences Research Journal (accepted). - Join international conference Saret Bun, Davin Sang, Phally ham, rathborey Chan (2023), Microplastics in the Mekong river of Cambodia. " A sustainable Natural and Engineered water systems Management conference, December 13-16 at Patumwan Princess hotel, Bangkok - one poster Pisey Phorn, Sakada Peov, Sreylim Eang, Phaly Ham, Rathborey Chan, and Saret Bun (2023). Optimization of aerated electrocoagulation-flotation process for color turbidity, and oil removal from synthetic slaughterhouse wastewater's

								12TH SCIENTIFIC DAY, June 8-9, 2023, Phnom Penh, Cambodia. - 3 engineering students graduated 1 master student is now conducting his research in the first year.
8	Development of locally-produced ceramic pot filter for household groundwater purification in rural Cambodia	Dr. HEU Rina	LBE/JICA	0	15000	2023-2024	To develop hybrid ceramic pot filter combined with coconut shell based granular activated carbon for metal removal in natural groundwater	- Fieldwork for groundwater collection - Groundwater quality testing - Field visit to private water supply operator - Develop hybrid ceramic pot filter Publication: Leng, B., Wai, M. P., Menh, L., Si, C. I., & Heu, R. (2023). Groundwater Purification Using Bio-Sand Filter Modified with Iron Oxide-Coated Sand and Activated Carbon. Key Engineering Materials, 972, 79-88.
9	Development of monitoring and controlling of IoT based aquaponics system using green energy (Acronym: smart aquaponics projec	Dr. TY Boreborey Dr. KET Pinnara	LBE/JICA	15000	15000	2023-2024	Proposal accepted	Perform pre-trail of the system including water quality control, and sea water formulation
10	Stopping Macro- and Microplastic Pollutants by Installing Solar-Powered Air Bubble Screening (SBS)	Dr. BUN Saret Dr. HAM Phally	UNDP	0	18000	2024	To reduce both macro- and microplastic pollutions in the sea, installing the barrier at the discharge wastewater canal could be the effective and applicable concepts. Therefore, the present project aims to develop the	

	Device at Discharge Wastewater Canal to the Sea of Sihanoukville, Cambodia						innovative approach to block macro- and microplastics before entering the sea by using solar-powered air bubble screening (SBS) device installing at the discharge wastewater canal in Sihanoukville of Cambodia.	
11	Rural Community Training on Safe Water Quality and its On-site Demonstration Testing	Dr. BUN Saret Dr. HAM Phally	SUMERNET	0	5000	2024	<p>This proposed activity goal is to extent the understanding or perspective of the people in the rural community of Cambodia about how to define the safe water for their daily use and its health effect caused by contaminated water to ensure the people will not judge the water quality by eye or its clearness leading to drink direct raw water without proper treatment.</p> <p>The objective of the present activity is to provide a training and on how to define the safe water and information of health effect of drinking untreated water as well as to demonstrate the scientific measurement of on-site water use to notify that not all clear water can be drunk (e.g. using alcohol as a clear liquid but cannot be drunk). The activities will be conducted at the community scale through various instruments including lecture slide, printed document in local language, poster, actual experiment of water quality measurement and health effect. Different communities around Tonle Sap River will be designed for the activities.</p>	

Annex 36. Research Proposal in 2024-2025 of ETM Unit.

No.	Project/Research Topic	Name of Researcher	Fund	Total budget	Period	Objectives	Status
1	Climate-Smart Agriculture Solutions	Dr. Kret Kakda Dr. Seang Sirisokha Mr.	USAID	\$150,000	2024-2026	<ul style="list-style-type: none"> - Maintaining or increasing agricultural productivity through mitigating climate change impacts and increasing climate change adaptation; - Increasing farm efficiency by adopting agricultural technologies (such as climate-resilient farming techniques); and - Improving value-added food processing, reducing production and processing costs, creating safe and 	Failed
2	Capacity for Cambodian Energy Efficiency (CapCEE)	Dr. VONGCHAN Kinnaeth Dr. CHAN Sarin Mr. HEANG Latin	LED	552,322	2025-2026	<ul style="list-style-type: none"> - CEMAT program is upgraded and equipped to offer quality training services for energy managers and auditors - SES-ITC strengthens the energy efficiency to the public and private sectors 	Passed
3	Python-Based LV Microgrid Planning Strategies: Clustered Topology and PV Hosting Capacity	Dr. VAI Vannak Mr. EAM Dara Mr. SUK Sievlong Ms. NEOV Yoklin Mr. YOU Lyhour Mr. HEANG Sokleap	ZE: Zero-Emission Energy Research	3000 USD	2024-2025	<ul style="list-style-type: none"> - Conduct desk research for microgrid planning and load profiles, - Develop an algorithm for optimal microgrid topologies: Clustering techniques with Python-based open-source software, - Develop an algorithm for PV hosting capacity at the clustered households with different tariffs, and validate with a small-scale prototype for monitoring and management 	Passed
4	Training Programme to Promote Low Carbon Buildings in Cambodia	Dr. CHAN Sarin Dr. VONGCHANH Kinnaeth Mr. HEANG Latin	GGGI	89,970	2024-2027	<ul style="list-style-type: none"> - Recruit and train 20 Qualified Master Trainers (MTs) for delivering the LCB training programme - Translate and Adapt Training Modules into Khmer. - Organize and Deliver the Training Programme (2.5 Years). 	Passed

Annex 37. Research Proposal in 2024-2025 of FTN Unit.

No.	Project/Research Topic	Name of Researcher	Fund	Total budget	Period	Objectives	Status
1	Valorization of Cambodian low-value fish through canning technology	Dr. MORM Elen Dr. PHAT Chanvorleak Dr. MITH Hasika	ARES	80,000	2025-2026	To develop the canned fish-based product using the freshwater and saltwater fish species	In review
2	The development of functional beverages with improved nutritional and sensorial properties toward local economic growth through diversifying Cambodia's agriculture products	Dr. PHAT Chanvorleak Dr. TAN Reasmey Dr. MITH Hasika Dr. SROY Sengly Dr. EK Pichmony Dr. THANH Channmuny Dr. HOUNG Peany	MoEYS	1,488,000	2025-2029	To develop soy-based drink, mango drink, and fermented drink for commercialization	Passed
3	Isolation the non-biogenic amine production starter cultures for Prahoc processing	Dr. THANH Channmuny Dr. MITH Hasika Dr. YOEURN Sereyvath Ms. LONH Sony	LBE-JICA	14,987	2025	To isolate for the non-biogenic production stains from the commercial Prahoc and apply as starter culture in Prahoc processing	Failed
4	Isolation the non-biogenic amine production starter cultures for Prahoc processing	Dr. THANH Channmuny Dr. PHAT Chanvorleak Dr. MITH Hasika Dr. COLLOMBEL Ingrid Prof. WACHE Yves	PROGRAMME TONLÉ SAP 2025	19,850	2025-2026	To investigate the biogenic amines suppression ability of the isolated starter culture in Prahoc processing	In review

5	Improvement of quality of Kimchi and garlic/ginger in honey	Dr. MITH Hasika	CAPRED & KE	8,000	2025	Product quality improvement	Passed
6	Intelligent and sustainable fish and sea food packaging based on Cambodian cassava starch responsive to histamine	Dr. PHAT Chanvorleak Dr. YOEUN Sereyvath Dr. MITH Hasika Dr. YOS Phanny	SEA-Europe JFS	330,375	2025-2027	To develop a sustainable biodegradable intelligent food packaging based on innovative polymer produced from Cambodian cassava starch, allowing customer monitoring the quality of food through optical detection of histamine	Failed
7	Pesticide Analysis in irrigation water of different rice practices_WAT4CAM	Dr. PHAT Chanvorleak Dr. YOEUN Sereyvath	CIRAD-AFD	24000	2024-2025	To investigate pesticide residues in heavy rice production region in Kanghot, Battambang, and Rovieng, Preah Vihear	Passed

Annex 38. Research Proposal in 2024-2025 of MIT Unit.

No.	Project/Research Topic	Name of Researcher	Fund	Total budget	Period	Objectives	Status
1	Integrating the Electrification and Smart Mechanisation of Two-Wheel Tractors with Precision Agriculture for Improved Productivity and Sustainability	Dr. SRANG Sarot (PI) Dr. VALY Dona Mr. KEO Chivorn Mr. SREY Sokserey	ACIAR	200,000	2024-2029	The aim of this project is to build the technological and socio-economic foundations for the design, manufacture, and field evaluation of electric and smart two-wheel tractors with precision agriculture capability, aiming to critically evaluate its potential to enhance the sustainability and productivity of Cambodian agriculture.	Passed
2	Development of Two Mobile Robots for Joining a Robocon Competition in 2025	Dr. SRANG Sarot (PI) Mr. SREY Sokserey	Takahashi Industrial & Economic Research Foundation	7,000	2024-2025	To provide lab members with a real and competitive environment to enhance their robotics skills through the design, development, and deployment of two mobile robots for the 2025 robotics competition.	Passed
3	Design and Implementation of Health Monitoring for Older People	Dr. NGETH Rithea (PI) Mr. SUM Rithea	Takahashi Industrial & Economic Research Foundation	5,000	2024-2025	To design and implement an affordable health monitoring system for older people living in rural area in Cambodia. Specific objectives are as following. (1) Design and develop an affordable ECG monitoring system; (2) Design a user interface; (3) Design an uploading data protocol to a cloud server.	Passed
4	GRAN-SEA Project: Granulometry Analysis of Southeast Asian Granular Agricultural Products Using Image Feature Processing	Dr. Made Windu Antara Kesiman Dr. VALY Dona	Forum Asosiasi LPPM LPTK Negeri Indonesia	10,000	2025-2026	The GRAN-SEA Project aims to develop a dataset, explore image processing methods, and create an automated system for granulometric analysis of Southeast Asian agricultural commodities, ensuring efficient, high-capacity quality assessment aligned with industry standards.	Submitted
5	Development of a Locally Adaptive Aqua-Agriculture System with a DX-driven Knowledge Sharing Platform	Dr. VALY Dona Dr. KET Pinnara Dr. PEC Rothna Dr. TY Boreborey Mr. HEL Chanthan	SATREPS		2025-2030	The C-Agri Project develops a smart Aqua-Agriculture system using IoT, AI, and automation for resource efficiency, establishes a demonstration farm for technology transfer, promotes sustainable food systems, and enhances research collaboration and capacity building in Cambodia.	Submitted

6	Innovative Production Line for Smart Electronic Devices for Regional Products and Applications	Dr. VALY Dona Dr. KRET Kakda Mr. HEL Chanthan	HEIP2	1,217,938	2025-2029	The project focuses on developing an advanced PCB fabrication and assembly process to enhance production efficiency and quality. It aims to design and prototype AI-powered smart farm controllers to improve agricultural productivity and energy monitoring devices for accurate consumption tracking and system integration. Additionally, the project will implement a commercialization strategy to strengthen industrial linkages and drive market adoption of these innovations.	Rejected
7	Optimizing Plant Growth in Indoor Vertical Farming: Leveraging AI and IoT with Biodegradable Growing Media	Dr. KET Pinnara Mr. HEL Chanthan Dr. VALY Dona Dr. TY Boreborey	JICA LBE INACON	15,000	2025	This research explores how integrating AI and IoT with biodegradable growing media can optimize resource efficiency in indoor vertical farming. It investigates how real-time data analytics improve water, energy, and nutrient management, aiming to enhance crop yield, sustainability, and urban food security while reducing environmental impact.	Rejected
8	Autonomous Land-Leveling Robot Tractor	Dr. SRANG Sarot (PI) Mr. TANG Sou Bun	Ministry of Agriculture, Forestry and Fishery	20,000	2024-2025	Develop a robot tractor capable of autonomously or semi-autonomously leveling agricultural land.	Passed
9	"Kayvika" Khmer Sign Language Translation	Mr. CHOU Koksai LANG Bandithvipho	Khmer Enterprise	1,500	2024-2026	The research aims to create a two-way sign language translation application. The app will translate from Khmer voice to sign language and will translate from sign language to Khmer voice.	Passed

Annex 39. Research Proposal in 2024-2025 of MSS Unit.

No.	Project/Research Topic	Name of Researcher	Fund	Total budget	Period	Objectives	Status
1	Enhanced Durability and Sustainability of Asphalt Concrete through Waste Plastic Recycling	Dr. Kuchvichea KAN, PI Dr. Phanny YOS, Co-PI	JICA-LBE	14,950	2025-2026	1. Developing Modified Emulsion Asphalts using recycled waste plastic and waste oil. 2. Developing cold-mixed asphalt concrete that incorporates recycled plastic pellets, providing a sustainable, climate-resistant pavement material	Passed
2	Hybrid Coatings For The Photodynamic Inactivation Of Microbial Infections	Mrs. AUN Srean Prof. YANN Molard Assoc. Prof. Dr. Marian Amela-Cortes Asst. Prof. Dr. YOS Phanny	BGF-MoEYS	42,500	2024-2027	1) to design and characterize the robust innovative multi-component combination for antimicrobial disinfection under visible light irradiation	Passed
3	Climate-resilient soil stabilization in cambodia's SUBGRADE: adapting to the challenge of flooding and seasonal variations.	Mr. Nuth Visal Prof. Olivier CUISINIER, (Supervisor, UL) Dr. KAN Kuchvichea, (Supervisor, ITC)	BGF-MoEYS	42,500	2024-2027	1) to pinpoint challenges of flooding and variation in temperature of mechanical property. 2) to enhance the soil subgrade in response to Cambodian seasonal challenges	Passed
4	Natural Rubber Latex Powdered Gloves for Medical applications	Dr. Yos Phanny Ms. Sreng Laymey	Takahashi	4990	2024-2025	- Produce examination powdered gloves from natural rubber latex - Examine antimicrobial effect biofillers such as pomelo, mangosteen, ginger, and sugarcane bargasse on latex gloves	Passed

5	Enhancing Sustainability in Concrete Products using Municipal Waste	Dr. Hin Raveth Dr. Heng Sounean Dr. Bun Polyka	Beton Block&Pave Company	10,000	2024-2025	- To study and produce concrete products using municipal wastes	In review
6	Smartphone-based Bridge Monitoring Involving Local Communities	Asst. Prof. Dr. Hirao Kensho Dr. Doung Piseth Prof. Dr. Sasaki Eiichi	Kajima Foundation	65,000	2025-2027	to develop a bridge damage monitoring application where local residents participate by using their smartphones to capture and evaluate bridge conditions	In review
7	Implementation of reusing soil waste from low lying plain as a backfill of MSE geogrid reinforced vertical slopes	Dr. Oeng Thaileng Dr. Heng Sounean Mr. Nuth Visal	JICA-LB	14,114	2025-2026	- To investigate the soil waste for reuse as a backfill for construction of RC slope.	Failed
8	Securing Environment by Recycling Marine Waste into Usable Concrete Block for Construction	Dr. Heng Sounean Dr. Oeng Thaileng Dr. Doung Piseth	UNDP	39,000	2024-2025	- To study and engage coastal communities for the collection of waste - To produce prototypes of pave block products for waste	Failed
9	Rubber-based value-added product improvement of rubber floor mat used for shock absorption applications	Dr. Yos Phanny Dr. Doung Piseth Ms. Sreng Laymey Dr. Yin Molika Dr. Houng Peany Mrs. Aun Srean	HEIP2	1,018,542	2025-2029	- To set up rubber technology hall to be capable in producing the real-scaled rubber floor mat towards commercialization. - To produce human resources in the field of rubber processing technology as part to support the economic growth and industries needs in this field. - To Improve the physical and mechanical properties of rubber floor mat prototypes from ITC SGA#12 towards commercialization.	Failed

Annex 40. Research Proposal in 2024-2025 of WAE Unit.

No.	Project/Research Topic	Name of Researcher	Fund	Total budget	Period	Objectives	Status
1	Integrating Habitat Design and Community Engagement for Sustainable Ecosystem Restoration	Dr. PENG Chanthol	Darwin, UK	90000	-	-	Fail
2	Cambodia Air Innovation Monitoring System	Dr. OR Chanmoly	USASCP, U. S	399000	-	-	Suspended evaluation
3	SATREPS: development and social implementation of greenhouse gas emission reduction technologies in paddy fields of west tonle sap lake by establishing a large paddy area water management system	Dr. SOK Ty Dr. SONG Layheang Dr. Peng Chanthol Dr. Ket Pinnara	SATREPS/JST/JICA	250000	2024-2028	Preparation to launch in April 2024	Passed
4	Integrated River Basin Management of the Mekong Basin Tributary for Adaptation to Climate Change	Dr. SOK Ty Dr. SONG Layheang Dr. OEURNNG Chantha	Mekong Korea Cooperation Fund (MKCF)	380000	2024-2027	<ul style="list-style-type: none"> - Identify flood hazards through field-based and modeling approaches by integrating extensive update datasets (hydrology, climate, land use, water quality, infrastructure)and strengthening community resilience. - Assess soil erosion and water quality to identify sustainable river basin management measures. 	Passed

						<ul style="list-style-type: none"> - Introduce nature base solution (NBS) into watershed management for improvement of flood risk and soil loss and biodiversity within the river basin. - To build capacity for integrated river basin management at the national and sub-national levels. <p>To develop and mainstream the policy brief for multi-stakeholders from the sub-national to the national level.</p>	
5	Addressing Water Scarcity through Groundwater Use: Development of Solar-Powered Groundwater Treatment System for Remote Area of Cambodia	Dr. BUN Saret Dr. HAM Phally	MTT-RRP	33000	2024-2025	(i) preliminary assessment including groundwater quality assessment as an input data for treatment technology design and social survey for assessing the demand and perspective of the target end users of the newly developed water treatment unit, (ii) optimization of groundwater treatment process in terms of treatment performance and power consumption, and (iii) evaluation the operation performance of prototype system in the real scale community.	Passed
6	Development of Eco-Friendly Microplastic Removal Filters from Seawater for Sea Salt Farms in Cambodia	Dr. THENG Vouchlay Ms. DOEURN Seyha, Mr. HENG Oudam, Dr. PENG Chanthol, Mr. PHUONG Sovathana	UNDP	39000	2024-2025	The main objective of the project is starting a pilot EMRF for the first microplastics (MPs) removal from seawater for salt farm in Cambodia, and raise awareness among the people about the risk of consuming microplastics through the food chain	Passed
7	Establishment of Sustainable Groundwater Management	Dr. EANG Khyeam	Mekong-Republic of Korea Cooperation Fund (MKCF)	499647	2025-2028	To develop a Comprehensive Groundwater Database to track and analyze groundwater changes annually, serving as a benchmark for sustainable management in the Lower Mekong Region. To promote Regional	Passed

	Platform in the Lower Mekong Region					Collaboration among Mekong countries and the ROK for Adaptive Groundwater Governance, integrating multi-year trend analysis into cross-border policy frameworks and capacity-building efforts.	
8	Establishing an Evidence-based National Adaptation Plan (NAP): National Climate Report	Dr. SOK Ty Dr. SONG Layheang Dr. KET Pinnara Mr. HOUT Meng Hour	Ministry of Environment (GREEN CLIMATE FUND)	60000	2024-2025	To analyze climate data and write a National Climate Report for Cambodia	Passed
9	Sustaining the shared groundwater resources of the Transboundary Cambodia-Vietnam Mekong River Delta aquifer under climate change impacts through Strategic Gender equality, disability, and social inclusion (GEDSI) tools and suitable Nature-based Solution (SAGA)	Dr. PEN Sytharith, Dr. SANG Davin	SEI	5000	2024-2025	-Enhance resilience in the face of climate change by integrating energy, food, and water nexus -Gender mainstreaming in groundwater resources management	Passed
10	Evaluation of Nature-based solutions for the enhancement of urban water security in South-East Asian Cities	Dr. PEN Sytharith Dr. HEU Rina	APN	8000	2024-2025	Access water supply and demand scenario of the Phnom Penh city of Cambodia. Identify feasible nature-based solution to enhance urban water security for drinking water and industrial water uses. Assess environmental and socio-economic impacts of the feasible NBS using water case study.	Passed

11	Anticipating the inversions of the Tonle Sap river (INVERSAP)	Dr. DUONG Ratha Dr. Paul Baudron, Dr. Ratha Doung, Dr. Khy Eam Eang, Mr. Sambo Lun, Dr. Sytharith Pen, Mr. Vuthy Chork, Dr. Sylvain Massuel Mr. Jonathan Van Hanja Dr. Kong Chhuon	IRD	100000	2024-2025	Anticipating the inversion of the Tonle Sap river through collaborative sampling.	Passed
12	Research collaboration on sustainable water resources management in Koh Ker heritage site	Mr. SOK Kimhuy Mr. Chork vuthy, Dr. Heng Sokchhay, Chhoun Kong	NAPV	12000	2024-2025	1. Planning atlas; 2. Hydraulic infrastructure system; 3. Water resources utilization; 4. Natural disasters; 5. Catchment development plans	Passed
13	Restoration of the Preah Vihear Temple's Gopura V (Phase II)	Mr. SOK Kimhuy Mr. Chork vuthy, Dr. Heng Sokchhay, Chhoun Kong	NAPV	51500	2024-2025	1. Seismic survey; 2. Hydrological study; 3. Geotechnical study; 4. Technical presentation and meeting at province	Passed
14	Mutual learning toward just-in-time information for grassroots climate adaptation in the lower Mekong countries	Dr. PENG Chanthol Ms. DOEURN Seyha; Dr. THENG Vouchlay	Toyota Foundation	60000	2024-2026	Understand best practices of people along the Mekong River toward climate change adaptation for hydrological change of the Mekong River (water level change and local adaptation) and share the knowledge between Thailand and Cambodia	Passed

Annex 41. List of index publication from ETM Research Unit for the last 5 year.

1. Oudaya Eth, Vannak Vai and Long Bun. (2024). Optimal Topology with Improved Phase Balancing and PV Hosting Capacity in a Low Voltage Distribution System. IJEETC. Doi : 10.18178/ijeetc.13.5.343-353.
2. Samphors Eng, Vannak Vai, Sothea Oeun, Monychot Sary, Phanit So, Dara Eam, Sokleap Heang, Sievlong Suk, Chhith Chhlonh, Darong Sorn, Kimsrornn Khon, Oudaya Eth. (2023). Development of Distribution System Automation for Teaching and Research at ITC: Digital Tool and GUI in MATLAB and SCADA. APPEEC. Doi: 10.1109/APPEEC57400.2023.10561917
3. Chhlonh, C., Alvarez-Herault, M. C., Vai, V., & Raison, B. (2023, October). Designing AC Low-Voltage Topologies for a Non-Electrified Area—A Case Study in Cambodia. In 2023 IEEE PES Innovative Smart Grid Technologies Europe (ISGT EUROPE) (pp. 1-6). IEEE.
4. Chhlonh, C., Alvarez-Herault, M. C., Vai, V., & Raison, B. (2023, October). Low-Voltage Microgrid Planning Strategies for an Isolated Village—A Case Study in Cambodia. In IECON 2023-49th Annual Conference of the IEEE Industrial Electronics Society (pp. 1-6). IEEE.
5. Pheak Kor, Kinnaeth Vongchanh, Latin Heang, Sarin Chan, Jackie Yang, (2023). MEASUREMENT SURVEY ON CONSTRUCTION LABOUR PRODUCTIVITY UNDER HEAT STRESS DURING THE COOL SEASON IN CAMBODIA, Journal of emerging technologies and innovative research (JETIR), 10(10), e174-e180.
6. Pisal Ken, Kinnaeth Vongchanh, Sarin Chan, Latin Heang, Samoeurn Cheng, (2023). THERMAL PROPERTIES OF BIOMASS BRIQUETTES MADE FROM WASTE MATERIALS, , Journal of emerging technologies and innovative research (JETIR), 10(10), e532-e538.
7. Sam Oeurn Cheng, Kinnaeth Vongchanh, Sarin Chan, Pisal Ken, Latin Heang, (2023). Experimental Study and Energy Analysis of Biomass Briquettes Produced from Dried Tree Leaves, Sawdust, Sugar Bagasse, and Rice Husk Using Fish Oil as a Binder, Journal of emerging technologies and innovative research (JETIR), 10(10), e532-e538.
8. Pheakdey Choun, Viza Heang, Sarin Chan, Kinnaeth Vongchanh, (2023), Investigation of the Effectiveness of the Modeling on the Glazed Window by Energy Simulation using EnergyPlus, Case study: Phnom Penh City, Cambodia, Journal of emerging technologies and innovative research (JETIR), 10(9), g114-g122.
9. Sophal Pey, Sarin Chan, Kinnaeth Vongchanh, Pheakdey Choun, (2023), Simulation of the Indirect Evaporative Cooling System using the 2-D Model Cross-flow for Cambodia's Climate Conditions, Journal of emerging technologies and innovative research (JETIR), 10(10), c299-c309.
10. Phoeurng Tork, Sarin Chan, Kinnaeth Vongchanh, Pheakdey Choun, (2023) Feasibility Study on the use of rooftop solar-powered Air conditioning in Residential Building, Case study: Phnom Penh City, Cambodia, Journal of emerging technologies and innovative research (JETIR), 10(10), c169-c177.
11. Mengly Morn, Kinnaeth Vongchanh, Sarin Chan, (2023) DESCRIPTIVE RESULTS OF THE PRELIMINARY DESIGN APPROACH OF THE SURVEY ON HEAT STRESS AMONG PRIMARY SCHOOL STUDENTS IN CAMBODIA, Journal of emerging technologies and innovative research (JETIR), 10(10), e197-e205.
12. Kimhak Neak, Kakda Kret, Tola Sreu, Sirisokha Seang, Chanmoly Or. (2023). The Milestone of Cambodian First Oil Production in the Khmer Basin, Gulf of Thailand. Open Journal of Yangtze Gas and Oil. 10.4236/ojogas.2023.82003.
13. Kimhak Neak, Kakda Kret, Tola Sreu, Sirisokha Seang, Sokunthea Khoun, Chanmoly Or. (2023). Integrated Petrophysical and Petrographical Studies for Reservoir Characterization: A Case Study of the

Khmer Basin in Cambodian Water, Gulf of Thailand. *International Journal of Oil, Gas and Coal Engineering*.

14. Sio, S., Or, Ch., Eng, Ch., Pech, S., Sreu, T. (2023). Review of Sedimentary Basin Evolution in Cambodia based on Tectonic Setting and Logical Information. *Berita Sedimentologi Indonesian Journal of Sedimentary Geology*, 9(2), 108-130. DOI: 10.51835/bsed.2023.49.2.403
15. Pech, S., Eng, C., Or, C., Rahim, A., Heng, R., Buth, C. and Sio, S. (2023) Depositional Environment of Sediments in Tonle Sap Sedimentary Basin, Western Part of Cambodia: Insights from Field and Geochemical Studies. *Open Journal of Geology*, 13, 651-666. doi: 10.4236/ojg.2023.137028.
16. Oeur, V., Or, C., Eng, C., Pech, S., Thorng, L., Sio, S. and Heng, R. (2023) Characterization of Sandstone Reservoir at Bokor Formation, Kampot Province, Kampong Som Basin, Onshore Cambodia. *International Journal of Geosciences*, 14, 792-811. doi: 10.4236/ijg.2023.148042.
17. Eam, D., Vai, V., Chhlonh, C., & Eng, S. (2023). Planning of an LVAC Distribution System with Centralized PV and Decentralized PV Integration for a Rural Village. *Energies*, 16(16), 5995. DOI: <https://doi.org/10.3390/app11052146>
18. Khon, K., Chhlonh, C., Vai, V., Alvarez-Herault, M. C., Raison, B., & Bun, L. (2023). Comprehensive Low Voltage Microgrid Planning Methodology for Rural Electrification. *Sustainability*, 15(3), 2841.
19. Kimsornn KHON, Chhith Chhlonh, Vannak VAI, Marie-Cecile ALVAREZ-HERAULT, Bertrand RAISON and Long BUN. 2023. Comprehensive low voltage microgrid planning methodology for rural electrification. <https://ieeexplore.ieee.org/abstract/document/10000324>
20. O. Eth, V. Vai, L. Bun, S. Eng and K. Khon, "Optimal Radial Topology with Phase Balancing in LV Distribution System Considering Energy Loss Reduction: A Case Study in Cambodia," 2022 4th International Conference on Electrical, Control and Instrumentation Engineering (ICECIE), Kuala Lumpur, Malaysia, 2022, pp. 1-6, doi: 10.1109/ICECIE55199.2022.10000324.
21. Ikeda, M., Kret, K., Tsuji, T., Ikeda, T., Tsuji, T., Onishi, K., & Nishizaka, N. (2022). Pore fabric anisotropy and elastic moduli of fault rocks from the Median Tectonic Line, Shikoku, southwest Japan. *Tectonophysics*, 834, 229366.
22. Kinnaeth VONGCHANH, Sarin CHAN, A preliminary study on investigation of the heat stress affecting the labor productivity, a case study: garment factory Phnom Penh, *ASEAN Engineering Journal*, 2022.
23. Kimsornn KHON, Vannak VAI, Marie-Cecile ALVAREZ-HERAULT, Long BUN, Bertrand RAISON. 2021., Planning Of Low Voltage Ac/Dc Microgrid For Un-Electrified Areas. <https://ieeexplore.ieee.org/abstract/document/9692581>
24. Kanika Yon, Marie-Cécile Alvarez-Hérault, Bertrand Raison, Kimsornn Khon, Vannak Vai, Long Bun., 2021. Microgrids planning for rural electrification. <https://ieeexplore.ieee.org/abstract/document/9494966>
25. V. Vai, «Design of AC Microgrid Topology with Photovoltaic Uncertainties in a Rural Village,» *Makara Journal of Technology*, 2021, <https://doi.org/10.7454/mst.v25i1.3759>
26. S. Suk, V. Vai, R. Lorm, C. Chhlonh, S. Eng and L. Bun, «Modifying Switch Opening and Exchange Method for Distribution Network Reconfiguration with Distributed Generations,» 2021 9th International Electrical Engineering Congress (iEECON), 2021, pp. 85-88, doi: 10.1109/iEECON51072.2021.9440343. (International peer review).
27. S. Suk, V. Vai, R. Lorm, C. Chhlonh, S. Eng and L. Bun, «Network Reconfiguration in Distribution Systems Based on Modified Sequential Switch Opening Method,» 2021 11th International Conference on Power, Energy and Electrical Engineering (CPEEE), 2021, pp. 143-146, doi: 10.1109/CPEEE51686.2021.9383247. (International peer review)
28. V. Vai et al., «Optimal Design of LVAC Distribution System Topology for a Rural Village,» 2021 9th International Electrical Engineering Congress (iEECON), 2021, pp. 93-96, doi: 10.1109/iEECON51072.2021.9440289. (International peer review)

29. V. Vai, S. Suk, R. Lorm, C. Chhlonh, S. Eng, and L. Bun. « Optimal Reconfiguration in Distribution Systems with Distributed Generations Based on Modified Sequential Switch Opening and Exchange » *Applied Sciences*, 2021, 11, no. 5 : 2146. <https://doi.org/10.3390/app11052146>. IF:2.679
30. R. Lorm, V. Vai, S. Suk, C. Chhlonh, S. Eng, L. Bun, « Service Restoration in Distribution Systems under Different Load Levels, » 2021 11th International Conference on Power, Energy and Electrical Engineering (CPEEE), 2021, pp. 122-126, doi : 10.1109/CPEEE51686.2021.9383358. (International peer review)
31. VAI Vannak, BUN Long, KHON Kimsrornn, Marie-Cécile Alvarez-Hérault, Bertrand Raison. 2020. Integrated PV and Battery Energy Storage in LVAC for a Rural Village: A Case Study of Cambodia. <https://ieeexplore.ieee.org/abstract/document/9255336>
32. R. Lorm, S. Eng, S. Suk, C. Chhlonh, L. Bun and V. Vai, « Service Restoration in Distribution System Using Modified Sequential Opening Branches, » 2021 9th International Electrical Engineering Congress (iEECON), 2021, pp. 69-72, doi : 10.1109/iEECON51072.2021.9440266. (International peer review)
33. C. Chhlonh, D. C. Riawan and H. Suryoatmojo, "Modeling and Simulation of Independent Speed Steering Control for Front In-wheel in EV Using BLDC Motor in MATLAB GUI," 2019 International Seminar on Intelligent Technology and Its Applications (ISITIA), Surabaya, Indonesia, 2019, pp. 270-275, doi: 10.1109/ISITIA.2019.8937199.
34. C. Chhlonh, D. C. Riawan and H. Suryoatmojo, "Independent Speed Steering Control of Rear In-wheel BLDC Motor in EV Based on Fuzzy Logic Controller in GUI," 2019 5th International Conference on Science and Technology (ICST), Yogyakarta, Indonesia, 2019, pp. 1-6, doi: 10.1109/ICST47872.2019.9166418.
35. Chhlonh, C., Riawan, D. C., & Suryoatmojo, H. (2019, April). Simulation of independent speed steering control of four in-wheel BLDC motors direct drive for electric vehicle using hybrid fuzzy-PI controller in Matlab GUI. In *Proceedings of the 2019 2nd International Conference on Electronics, Communications and Control Engineering* (pp. 67-71).
36. C. Chhlonh, B. Kim, P. Chrin, S. Am and T. Seng, "Four In-Wheel BLDC Motors Speed Control in EV Based on Hybrid Fuzzy-PI Controller Visual on GUI," 2021 International Symposium on Electrical and Electronics Engineering (ISEE), Ho Chi Minh, Vietnam, 2021, pp. 166-171, doi: 10.1109/ISEE51682.2021.9418790.
37. T. Nozaki, T. Nagase, Y. Takaya, et al., « Subseafloor sulphide deposit formed by pumice replacement mineralisation, » *Scientific Report* 11, 8809 (2021). <https://doi.org/10.1038/s41598-021-87050-z>. IF: 5.134
38. Kimsrornn KHON, Vannak VAI, Marie-Cecile ALVAREZ-HERAULT, Long BUN, Bertrand RAISON., 2021. Factors affecting the breakdown voltage along the insulator surface of a busbar for power modules
39. K. KHON, S. FICHTNER, M. ALVAREZ-HERAULT, V. VAI, L. BUN, B. RAISON, ‘Optimal design of low voltage AC/DC microgrid’ SYMPOSIUM DE GENIE ELECTRIQUE (SGE 2020), 30 JUIN – 2 JUILLET 2020, NANTES, France
40. B. Kim, E. Boulaud, E. Boisaubert, S. Am, P. Chrin, “Study of the control of an AC voltage stabilizer using lqr and anti-windup”. 22nd European Conference on Power Electronics and Applications 7-11 September 2020, Lyon (France). Doi:10.3390/en13102410
41. Cravioto, J.; Ohgaki, H.; Che, H.S.; Tan, C.; Kobayashi, S.; Toe, H.; Long, B.; Oudaya, E.; Rahim, N.A.; Farzeneh, H. The Effects of Rural Electrification on Quality of Life: A Southeast Asian Perspective. *Energies* 2020, 13, 2410. <https://doi.org/10.3390/en13102410>
42. Kret, K., Tsuji, T., Chhun, C., and Takano, O., 2020. Distributions of gas hydrate and free gas accumulations associated with upward fluid flow in the Sanriku-Oki forearc basin, northeast Japan. *Marine and Petroleum Geology*. <https://doi.org/10.1016/j.marpetgeo.2020.104305>

43. M. Pietrzak-David, B. Kim, P. Maussion, C. Phok “Frugal Innovation for Sustainable Rural Electrification.” 22nd European Conference on Power Electronics and Applications 7-11 September 2020, Lyon (France).
44. Sok Chea AM, Phok CHRIN, Bunthern KIM, Menghorng BUN, Phing LIM, “High Isolated Transformer for a Serie Connected IGBTs Power Supply”.iEECON 2020, The international Electrical Engineering Congress, Thailand.
45. Vannak Vai and Long Bun, “Study on the Impact of Integrated PV Uncertainties into an Optimal LVAC Topology in a Rural Village”, ASEAN Engineering Journal, Vol. 10, No. 1, pp.79-92, March 2020.
46. Vannak Vai, Long Bun and Hideaki Ohgaki, “Integrated Battery Energy Storage into an Optimal Low Voltage Distribution System with PV Production for an Urban Village”, International Journal on Advanced Science, Engineering and Information Technology, Vol. 10, No. 6, pp.2458-2464, December 2020
47. Vannak Vai, Marie-Cécile Alvarez-Hérault, Bertrand Raison and Long Bun, “Optimal Low-Voltage Distribution Topology with Integration of PV and Storage for Rural Electrification in Developing Countries: A Case Study of Cambodia”, Journal of Modern Power Systems and Clean Energy, Vol. 8, No. 3, pp.531-539, May 2020

List of Non-index publications for the last 5 years

1. K. Thieng, V. Vai, O. Eth, “A Study of Decentralized Battery Energy Storage Integration into an Optimal Grid-Connected PV System with Zero Power Injection Considerations”, Techno-Science Research Journal, Institute of Technology of Cambodia, Cambodia, 2023.
2. Y. Neov, K. Khon, O. Eth, “Comparative Analysis of Different Clustering Techniques in Hybrid AC/DC Microgrid”, Techno-Science Research Journal, Institute of Technology of Cambodia, Cambodia, 2023.
3. Latin Heang, Porchaing Choeng, Kinnalesh Vongchanh, Sarin Chan. Experimental Investigation on Sawdust and Tree Leaf Briquette Using Fish Residues Oil as a Binder. Techno-Science Research Journal 8 (2020)
4. Porchaing Choeng, Latin Heang, Kinnalesh Vongchanh, Sarin Chan. Experimental Investigation on Rice Husk and Bagasse Briquette Using Fish Oil as Binder. Techno-Science Research Journal 8 (2020)

List of Conferences for the last 5 years

1. Pheak KOR, Kinnalesh VONGCHANH, (2025). A Review of Environmental Factors Affecting Students’ Cognitive Performance. 14th Scientific day conference, Institute of Technology of Cambodia.
2. Pagnasatyavorn Sreynattha, Vannak Vai, Kimsrornn Khon, (2025). A Frequency Stability Analysis for BESS placement under high penetration of IBRs (Solar PV) considering Load and Solar PV location. 14th Scientific day conference, Institute of Technology of Cambodia.
3. Sak SREY, Vannak VAI, Kimsrornn KHON, (2025). Coordinated Reactive Power Control Using Genetic Algorithm for Loss Minimization in PV Integrated Distribution Networks. 14th Scientific day conference, Institute of Technology of Cambodia.
4. Kechki OENG, Vannak VAI, Chhith CHHLONH, (2025). Optimal number of EV charger stations in distribution system with 24-hour EV Load Profiles Estimation. 14th Scientific day conference, Institute of Technology of Cambodia.
5. Samphors ENG, Julien ALLARD, Vannak VAI, François VALLEE, (2025). Maximizing PV Hosting Capacity in Low-Voltage Distribution Networks: A Case Study in Cambodia. 14th Scientific day conference, Institute of Technology of Cambodia.
6. Kimhab HANG, Chhith CHHLONH, Vannak VAI, (2025). A Comparative Study of Topology Design Strategies for Rural LV Distribution Systems. 14th Scientific day conference, Institute of Technology of Cambodia.

7. CHEA Chantola, Kinnalesh VONGCHANH, HOEUNG Hollin, HEANG Latin, CHAN Sarin. (2025). Calibration of DEM Parameters Using the Angle of Repose for Biomass Materials. 14th Scientific day conference, Institute of Technology of Cambodia.
8. Latin Heang, Kinnalth Vongchanh, Chan Sarin, (2025). Heat Stress and Construction Labor Productivity: Identifying Key Factors Affecting Cambodian Construction Workers. 14th Scientific day conference, Institute of Technology of Cambodia.
9. Hollin Hoeung, Kinnalesh Vongchanh, Chantola Chea, Latin Heang, Sarin Chan, (2025). 3D Modeling of a Continuous Mixing Machine for Biomass Briquette Systems. 14th Scientific day conference, Institute of Technology of Cambodia.
10. Prom Piseth, Vannak Vai, Kimsrornn Khon, (2025). Economic analysis of solar rooftop at Toyota Cambodia Office in Phnom Penh by using PVsyst software: EAC OLD vs New Regulation. 14th Scientific day conference, Institute of Technology of Cambodia.
11. Tangly Ty, Menghorng Bun, Vannak Vai, Sievlong Suk, (2025). Inverter Control Strategies for Active and Reactive Power in Photovoltaic Production for Grid Integration. 14th Scientific day conference, Institute of Technology of Cambodia.
12. Bun Panha, Kinnalesh Vongchanh, Chan Sarin, (2025). Energy Consumption Simulation of a Three-Story Villa Using DesignBuilder. 14th Scientific day conference, Institute of Technology of Cambodia.
13. Sreynoch Dum, Chhor Yi Ly, Marany Sat, Navin Chheat, Nhornhoem Pich, Bunsong Sey, Sirisokha Seang, Kakda Kret, Chanthourn Thuy, Tharith Sriv, (2025). Analysis of Iron Ores and Slags from Archaeological Sites by Using Energy Dispersive X-ray Spectroscopy and X-ray Diffraction Technique. 14th Scientific day conference, Institute of Technology of Cambodia.
14. HANG Kimhab, CHHLONH Chhith, VAI Vannak, (2025). A Comparative Study of Topology Design Strategies for Rural LV Distribution Systems. 14th Scientific day conference, Institute of Technology of Cambodia. (Poster).
15. Vanda SRY, Darong SORN, Kimsrornn KHON, Raphael CAIRE, (2025). Agent-based Dynamic Distributed Optimization using ADMM in Microgrids. 14th Scientific day conference, Institute of Technology of Cambodia. (Poster).
16. Monychot SARY, Jérôme BUIRE, Anotine LABONNE, Vannak VAI, (2025). Modeling Assessment of Small-Scale System Integration Multi-Machine and Inverter-Based Resource. 14th Scientific day conference, Institute of Technology of Cambodia. (Poster).
17. Monioudom O., Vincent D, Remy. R.M., Marie-Cécile A., Lucas L., Vannak V., Kimsrornn K, (2025). Grid Impact of Battery Energy Storage Systems Participating in Energy Markets. 14th Scientific day conference, Institute of Technology of Cambodia. (Poster).
18. Bora NAING, Antoine LABONNE , Jérôme BUIRE, Vannak VAI, (2025). Voltage Coordination in Distribution Grid (HIL and Digital Twin). 14th Scientific day conference, Institute of Technology of Cambodia. (Poster).
19. Chakrya Chim, Benoit Delinchant, Vannak Vai, Kimsrornn Khon, (2025). Improving Solar Forecasting: A Machine Learning Approach with Nested Cross-Validation Strategies. 14th Scientific day conference, Institute of Technology of Cambodia. (Poster).
20. Sothea Oeun, Jérôme Buire, Antoine Labonne, Vannak Vai, Kimsrornn Khon, (2025). An Integrated Small-Signal and Electromagnetic Transient Analysis Tool for Power System Stability. 14th Scientific day conference, Institute of Technology of Cambodia. (Poster).
21. Heang Latin, Kinnalesh Vongchanh. Yang Yang, Chan Sarin, Kor Pheak (2024), Environmental Heat Stress and Labor Productivity: A Case Study of Cambodian Construction Workers During Hot Months, International Conference on National Science and Engineering (ICNSE 2024).
22. Kinnalesh Vongchanh, Sarin Chan, Albert Chan, Yang Yang (2024) Descriptive Analysis on the Impact of Thermal Environment on Construction Labor Productivity in Cambodia, International Conference on National Science and Engineering (ICNSE 2024).

23. Kakda Pov, Kakda Kret, Kimtho Po, Sirisokha Seang, Christophe Révillion, Thibault Catry, Renaud Hostache, Vincent Herbreteau, Vannak Ann (2024). Land Surface Temperature and Green Health Vegetation Variability across Lithology and Land Use and Land Cover in the Chrey Bak catchment. KHEOBS Day.
24. Chan Virak, Sirisokha Seang, Kakda Kret, Kotaro Yonezu, Koichiro Watanabe. 2024. Preliminary study on Petrography and Geochemistry of Basaltic rock in Ratanakiri province, Northeast Cambodia. The 13th Scientific day conference, Institute of Technology of Cambodia, Cambodia.
25. Jolsa Heng, Sirisokha Seang, Kakda Kret, Kotaro Yonezu, Koichiro Watanabe. 2024. The Quart veins, hydrothermal alteration, and ore mineralization of epithermal prospect, Phnom Sro Ngam, Chhouk district, Kampot province. The 13th Scientific day conference, Institute of Technology of Cambodia, Cambodia.
26. Yoklin Neov, Oudaya Eth, Kimsrornn Khon, “Comparative Analysis of Different Clustering Techniques in Hybrid AC/DC Microgrid”, 12th Scientific day conference, Institute of Technology of Cambodia, Cambodia, 2023.
27. Kimtheng Thieng, Vannak Vai, Oudaya Eth, Samphors Eng “Study of the Technical Impact of Battery Energy Storage on PV Hosting Capacity in LVAC Distribution System: A Case Study in Cambodia” 12th Scientific day conference, Institute of Technology of Cambodia, Cambodia, 2023.
28. Kakda Pov, Kakda Kret, Sirisokha Seang, Kotaro Yonezu, Koichiro Watanabe, Chanmoly Or. Kimhak Neak, Chanmaly Chhun, Seangleng Hoeun. (2023). Remote sensing techniques using advanced space-borne thermal emission and reflection (ASTER) and Landsat-8 in the detection of alterations in Preah Vihear, North Cambodia. International Symposium on Earth Science and Technology, Japan.
29. Vannak Por, Seang Sirisokha, Kakda Kret, Kimhouy Oy, Jaydee Ammugauan, 2023. Lithology, Ore Mineralization, and Hydrothermal Alteration of Canada Wall Porphyry Cu-Mo-Au at Andongmeas, Ratanakiri, Cambodia. The 12th Scientific Day Institute of Technology of Cambodia.
30. Rorn Khanin, Seang Sirisokha, Kret Kakda, Kimhouy Oy. Lithology, 2023. Alteration Minerals, and Ore Mineralization in Memot, Tbong Khmum Province, Cambodia. The 12th Scientific Day Institute of Technology of Cambodia.
31. Soy Makara, Sath Sithea, Muon Ratha, Seang Sirisokha, Kret Kakda, Ann Vannak, Pascal Jouquet, Rainer Zaiss, 2023. Use of historical aerial photographs for land use mapping in Stung Chrey Back catchment between 1952-1972. The 12th Scientific Day Institute of Technology of Cambodia.
32. Pottheanaram Nhim, Sirisokha Seang, Kakda Kret, Kimhouy Oy, Jaydee Ammugauan Lithology, Ore mineralization, and Hydrothermal Alteration of Drill hole ZK_40 in Chhouk District, Kampot Province, Cambodia, 2023. The 12th Scientific Day Institute of Technology of Cambodia.
33. Chandara Seng, Sirisokha Seang, Kakda Kret, Jolsa Heng, Yana Chhoeun, Ravey Chan, Mithona Horn, Vireak Chan, Muhammad Irman Khalif Ahmad Aminuddin, 2023. Preliminary Study on Petrography and Geochemistry of Basaltic Rock in Mondulkiri, and Ratanakiri Province, Northeast Cambodia, The 12th Scientific Day Institute of Technology of Cambodia.
34. Kheng Rothana, Sirisokha Seang, Kakda Kret, Oy Kimhouy, Hang Bunna, Jaydee Ammugauan, Samnang Kong, 2023. Lithology, Hydrothermal Alteration, and Ore Mineralization of Area 5 in Koh Sla, Chhouk District, Kampot Province, Southern Cambodia. The 12th Scientific Day Institute of Technology of Cambodia.
35. Kimhak Neak, Kakda Kret, Tola Sreu, Kakda Pov, Chanmoly Or, Sokunthea Khoun. (2023) Integrated Petrophysical and Petrographical Studies for Reservoir Characterization: A Case Study of the Khmer Basin in Cambodian Water, Gulf of Thailand. COORDINATING COMMITTEE FOR GEOSCIENCE PROGRAMMES IN EAST AND SOUTHEAST ASIA (CCOP), Thailand.
36. Latin Heang, Kinnaeth Vongchanh, Pheak Kor, Sarin Chan, Yang Yang, A CASE STUDY OF HEAT STRESS AND CONSTRUCTION LABOR PRODUCTIVITY IN PHNOM PENH, CAMBODIA, Heat on Human Health Symposium 2023, 15-16 Nov 2023, Bangkok, Thailand.

37. Kinnalesh Vongchanh, Heat stress investigation in industrial/workplace environment to prevent the productivity losses for Cambodia, 4th Asia Pacific Conference on Industrial Engineering and Operations Management in HCMC, 11-14 Sep 2023, Vietnam.
38. Pheak Kor, Kinnalesh Vongchanh, Latin Heang, Jackie Yang Yang , Sarin Chan, Investigation on the Impact of Heat Stress on Construction Labor Productivity during the Cool Season in Cambodia, the 12 Scientific Day, 08-09 June 2023, Phnom Penh, Cambodia.
39. Sophal Pey, Sarin Chan, Kinnalesh Vongchanh, Simulation of an indirect evaporative cooling system using the 2-D model cross flow for Cambodia's climates, the 12 Scientific Day, 08-09 June 2023, Phnom Penh, Cambodia.
40. C. Chhlonh, M. -C. Alvarez-Herault, V. Vai and B. Raison, "Low-Voltage Microgrid Planning Strategies for an Isolated Village — A Case Study in Cambodia," IECON 2023- 49th Annual Conference of the IEEE Industrial Electronics Society, Singapore, Singapore, 2023, pp. 1-6, doi: 10.1109/IECON51785.2023.10312050.
41. Eng, S., Chou, K., Thourn, K., Vai, V., Kim, B., Thiriet, J. M., & Yahoui, H. (2023, March). "A Survey on Industrial Sector Status for Curricula Improvement Linked to Industry 4.0 in Electrical Engineering Program at ITC". In 2023 Joint International Conference on Digital Arts, Media and Technology with ECTI Northern Section Conference on Electrical, Electronics, Computer and Telecommunications Engineering (ECTI DAMT & NCON) (pp. 330-334), Phuket, Thailand, DOI: 10.1109/ECTIDAMTNCON57770.2023.10139750
42. Thourn, K., Kim, B., Eng, S., Vai, V., Chou, K., Thiriet, J. M., ... & Yahoui, H. (2023, March). "Center of Excellence for Control and Automation in the Context of ASEAN Factori 4.0 Project". In 2023 Joint International Conference on Digital Arts, Media and Technology with ECTI Northern Section Conference on Electrical, Electronics, Computer and Telecommunications Engineering (ECTI DAMT & NCON) (pp. 415-418), Phuket, Thailand, DOI: 10.1109/ECTIDAMTNCON57770.2023.10139649
43. Neov, Y., Khon, K., Eth, O., & Vai, V. Comparative Analysis of Different Clustering Techniques in Hybrid AC/DC Microgrid: Hierarchical Vs K-M, Malaysia, 2023 8th IEEE International Conference on Recent Advances and Innovations in Engineering (ICRAIE)-ICRAIE 2023.
44. Thieng, K., Eth, O., Samphors, E., Vai, V. A Study of Decentralized Battery Energy Storage Integration into an Optimal Grid-Connected PV System with Zero Power Injection Considerations, Techno-Science Research Journal 2023.
45. Heang, L., Vongchanh, K., Chan, S., Kor, P., & Yang, Y. 2023. Effects of Heat Stress on Cambodian Construction Productivity. The CCCA3 Knowledge Sharing Event 2023.
46. Oeun Sothea, Eng Samphors, Vai Vannak, Chim Charkya, So Phanit, Sary Monychot, LV System Modelling Considers Reverse Power Flow Analysis using Relay Vs Battery, the 12th scientific day of ITC, 8-9 June 2023, Phnom Penh, Cambodia.
47. SARY Monychot, VAI Vannak, ENG Samphors, SO Phanit, OEUN Sothea, CHIM Chakrya, Optimize Phase Balancing and Sizing DGs at the Rural Village in Cambodia, the 12th scientific day of ITC, 8-9 June 2023, Phnom Penh, Cambodia.
48. Chim Chakrya, Oeun Sothea, Eng Samphors, Vai Vannak, So Phanit, Sary Monychot, Rural Electrification with Off-Grid system, the 12th scientific day of ITC, 8-9 June 2023, Phnom Penh, Cambodia.
49. Thyra Thon, Vannak Vai, Darong Sorn, Samphors Eng, Techno-Economic Analysis of Feeder Routing for MV Distribution Systems, the 12th scientific day of ITC, 8-9 June 2023, Phnom Penh, Cambodia.
50. Kimtheng Thieng, Vannak Vai, Oudaya Eth, Samphors Eng, Study of the Technical Impact of Battery Energy Storage on PV Hosting Capacity in LVAC Distribution System: A Case Study in Cambodia, the 12th scientific day of ITC, 8-9 June 2023, Phnom Penh, Cambodia.
51. Rorn, K., Seang, S., Kret, K., Oy, K. and Ammugauan, J. (2023) Lithology, Alteration Minerals, and Ore Mineralization in Memot, Tbong Khmum Province, Cambodia. Proceedings of the ITC's 12th Scientific Day, 8-9 May 2023

52. Por, V., Seang, S., Kret, K., and Oy, K. (2023) Lithology, Ore mineralization, and Hydrothermal Alteration of Canada Wall Porphyry Cu-Mo-Au at Andongmeas, Ratanakiri, Cambodia. Proceedings of the ITC's 12th Scientific Day, 8-9 May 2023
53. Neov Yoklin, Oudaya Eth, Kimsornn KHON, Comparative Analysis of Different Clustering Techniques in Hybrid AC/DC Microgrid, Proceedings of the ITC's 12th Scientific Day, 8-9 May 2023
54. Pheak Kor, Latin Heang, Jackie Yang Yang, Kinnalesh Vongchanh, Sarin Chan, Assessing on the Impact of Heat Stress on Construction Labor Productivity during Cool Season in Cambodia, Proceedings of the ITC's 12th Scientific Day, 8-9 May 2023.
55. Sophal Pey, Sarin Chan, Kinnalesh Vongchanh, Simulation of an indirect evaporative cooling system using the 2-D model cross flow for Cambodia's climates, Proceedings of the ITC's 12th Scientific Day, 8-9 May 2023.
56. K Vongchanh and S Chan, Testing the hydraulic press machine for densification of biomass briquette for household use, International postgraduate conference for energy research, December 19, 2022, Kuala Lumpur, Malaysia.
57. Pheakdey Choun, Viza Heang, Sarin Chan, Kinnalesh Vongchanh, Simulation of Energy consumption for Flat using EnergyPlus, the 11th scientific day of ITC, 5-6 May 2022, Phnom Penh, Cambodia.
58. V. Chea, L. Heang, K. Vongchanh, S. Chan, A Descriptive Results on Environment Affecting Pupils in Cambodia – Case Study Primary Schools in Phnom Penh, 2nd ASEAN International Conference on Energy and Environment, 14-15 September 2022, Phnom Penh, Cambodia.
59. Morn Mengly, Kinnalesh VONGCHANH, CHAN Sarin, Latin HEANG, A Descriptive Results on Environment Affecting Pupils in Cambodia – Case Study Primary Schools in Phnom Penh, 2nd ASEAN International Conference on Energy and Environment, 14-15 September 2022, Phnom Penh, Cambodia.
60. Samoeurn Cheng, Kinnalesh Vongchanh, Sarin Chan, Latin Heang, Pisal Ken, Exergy Analysis of Biomass Briquette System, The 15th Regional Conference on Energy Engineering And The 13th International Conference on Thermofluids 2022, 25-26, October, 2022, Yogyakarta, Indonesia.
61. Pisal Ken, Kinnalesh Vongchanh, Sarin Chan, Latin Heang, Samoeurn Cheng, Thermal Properties of Biomass Briquettes made from Waste Materials. (2022). The 15th Regional Conference on Energy Engineering and The 13th International Conference on Thermofluids 2022, 25-26, October, 2022, Yogyakarta, Indonesia.
62. Kinnalesh Vongchanh, Sarin Chan, Testing the hydraulic press machine for densification of biomass briquettes for household use, The International postgraduate conference for energy research 2022, 19 December 2022, Kuala Lumpur, Malaysia.
63. Ly, P., Seang, S., Kret, K., Oy, K., Yonezu, K., Watanabe, K., Sreu, T. (2022) Lithology, hydrothermal alteration, and ore characteristics of Area-1 in Koh Sla, Chhouk district, Kampot Province, southern Cambodia. Proceedings of the International Symposium on Earth Science and Technology, Japan.
64. Chheuy, P., Kret, K., Seang, S., Or, C., Kong, S., Kry, R., Oy, K., Chan, C., Sreu, T., Hoeun, S., Hoeun, S., Chhun, C., Neak, K. (2022) Hydrothermal Alteration Mineral Mapping by Integrating of ASTER and Landsat-8: A case study in Phnom Peam Louk, Kompong Chhang Province, Southwest Cambodia. Proceedings of the International Symposium on Earth Science and Technology, Japan 2022.
65. Neak, K., Kret, K., Sreu, T., Or, C., Seang, S. (2022). Petrophysical and Petrographical Studies for Characterization of Reservoir Quality of Cambodian Offshore: A Case Study on the Khmer Basin in the Gulf of Thailand. Proceedings of the International Symposium on Earth Science and Technology, Japan 2022.
66. Boeurn, C., Seang, S., Kret, K., Yonezu, K., Watanabe, Z., Zaw, K. (2022) Geology and Hydrothermal Alteration of Skarn Deposit in Area 4, Phnom So Ngam Tenement, Chhouk District, Kampot Province, Cambodia. Proceedings of the International Symposium on Earth Science and Technology, Japan 2022.
67. Kim, C., Kret, K., Seang, S., Kong, K., Or, C., Oy, K., Ammuguan, J., Heoun, S., Chhun, C., and Neak, K. (2022) Lithological Analysis of Koh Nheak, Mondoukiri Province Using Landsat-8 OLI and ASTER. Proceedings of the International Symposium on Earth Science and Technology, Japan 2022.

68. M. Morn, K. Vongchanh, S. Chan, L. Heang (2022), A Descriptive Results on Environmental Affecting Pupils in Cambodia – Case Study Primary Schools in Phnom Penh, The 2nd ASEAN International Conference on Energy and Environment.
69. V. Chea, L. Heang, K. Vongchanh, S. Chan (2022), Workers' Perceptions of Occupational Heat Stress- a survey among garment workers in Phnom Penh, The 2nd ASEAN International Conference on Energy and Environment.
70. P. Ken, K. Vongchanh, S. Chan, L. Heang, S. Cheng (2022), Investigation of Briquette Thermophysical Properties and Gas Emissions, Seminar Thermofluid UGM
71. S. Cheng, S. Chan, K. Vongchanh, L. Heang, P. Ken (2022), Investigation of Briquette Thermophysical Properties and Gas Emissions, The 11th Scientific Day
72. P. Ken, K. Vongchanh, S. Chan, L. Heang, S. Cheng (2022), Exergy Analysis of Biomass Briquette System, The 11th Scientific Day.
73. Muoy Y. H., Chungyeon L., Saranyu H., Chandoeun E., Frederic N., 2022. Quality assurance of Concrete pile using Cross-hole Sonic Logging and Soil Profile. International Symposium on Earth Science and Technology 2022.
74. KEO T., HENG. M. Y., CHORK S., LANG R., HENG H., 2022., The Primary Geochemistry Evaluation on the Geothermal source in Te Teuk Pus Hot Spring in Oral district, Kompong Speu province, Cambodia., International Symposium On Earth Resources And Geo-Environmental Technology 2022.
75. Chungyeon L., Chandoeun E., Muoy Y. H., Phanny Y., 2022., Concrete Pile Defect Identification: Insights from Cross-Hole Sonic Logging and High Strain Dynamic Pile Test., The 4th ICCEE Proceedings.
76. Chungyeon L., Chandoeun E., Muoy Y. H., Phanny Y., 2022., Cross-Hole Sonic Logging and Dynamic Load Test for Concrete Pile Integrity Analysis., THE 11TH SCIENTIFIC DAY, Phnom Penh.
77. Sreymean Sio, Chandoeun Eng, Chanmoly Or. (2022). Seismic Interpretation and Tectonic Evolution of Tonle Sap Basin, Onshore Cambodia, the 11th Scientific Day of ITC
78. Sreymean Sio Chanmoly Or, Chandoeun Eng (2022). Review of Sedimentary Basin Formation and Petroleum System of Khmer Basin, Offshore Cambodia, the International Symposium on Earth Science and Technology 2022.
79. Sopheap PECH, Chandoeun ENG, Chanmoly OR, Sreymean SIO, Ratha HENG, Chitra BUTH (2022). Geochemistry of Shales and Limestones in Battambang Province: Implications for Depositional Environment, the 1st International Conference on Earth Resources and Geo-Environment Technology 2022.
80. Sreyleap Koem, Chandoeun Eng, Sopheap Pech, Kimhouy Oy, Sreymean Sio (2022). Sedimentary Facies and Sandstone Characteristics of Outcrop at Phnom Thippadei, Battambang Province, Cambodia, the 1st International Conference on Earth Resources and Geo-Environment Technology 2022.
81. They Chhun, Chandoeun Eng, Kimhouy Oy, Sopheap Pech, Sreymean Sio, Chaimongkhon Proeung. (2022). Petrography and geochemistry properties of limestone at Sampov Mountain in Battambang province, Cambodia, the 1st International Conference on Earth Resources and Geo-Environment Technology 2022.
82. Vechheka OEUR, Chandoeun ENG, Sopheap PECH, Kimhouy OY, Sreymean SIO. (2022). Lithofacies identification of outcrop in Takream mountain at Pouy Svay village, Takream Commune, Banan District, Battambang Province, Western Tonle Sap Basin, Onshore Cambodia, he 1st International Conference on Earth Resources and Geo-Environment Technology 2022.
83. Sreymean Sio, Chanmoly Or, Chandoeun Eng. (2021). Review of Petroleum Systems Around Cambodia, the 10th Scientific Day of ITC.
84. Reach S. L., Muoy. Y. H. (2021). Preliminary Investigation of Geothermal Reservoir in Oral District Kampong Speu Province, Cambodia. Virtual GEOSEA 2021.

85. Sokheng C., Muoy Y. H., Ichhuy N., and Phanny Y. (2021). The Preliminary Investigation on Geothermal Hot Spring, Te Tek Pus in Oral District, Kampong Speu Province, Cambodia., International Symposium on Earth Science and Technology 2021., p172-176., (best paper award).
86. Menghor LEAP., Muoyyi HENG., Nallis KRY., Ichhuy NGO. (2020). Investigation on lithology and mineral alteration of geothermal resources in Te Teuk Pus hot spring, Kampong Speu province, Cambodia., 12th AUN/SEED-Net Regional Conference on Geological and Geo-Resources Engineering.
87. Menghor LEAP., Muoyyi HENG., Nallis KRY., Ichhuy NGO. 2020. Primary Investigation on Lithology and Alteration for Geothermal Resource in Te Tekpos, Oral District, Kompong Speu Province, Cambodia., Proceedings of International Symposium on Earth Science and Technology, 2020.p 450-456.
88. Sokvireak Say., Chanmoly Or., Muoyyi Heng. (2020). Hydrocarbon Reservoir Characterization Using Well Logs Data Analysis, Offshore Cambodia. Proceedings of International Symposium on Earth Science and Technology, 2020, p216-221.
89. K. Vongchanh (2021), Alternative of biomass waste to energy sources as biomass briquettes in Cambodia, 11th Annual International Conference on Industrial Engineering and Operations Management.
90. K. Vongchanh (2021), Development of home solar dryer for drying of fish in Cambodia, International Symposium on Environment/Eco-technology and Policy (EETP) in East Asian
91. L. Heang, K. Vongchanh, S. Chan. (2020). Investigation on Application of Fish Oil as Binding Material in Biomass Briquetting Process, The 10th RC MEManuE 2020.

Annex 42. List of publication from FTN Research Unit.

List of Index publications for the last 5 year

1. Bunthan, M., Pov, L., Kong, S., Say, M., Nat, Y., Tan, C. P., & Tan, R. (2024). Study of kinetic model for the adsorption of β -carotene on activated bleaching earth in the bleaching of Cambodian soybean oil. *Journal of Food Science and Nutrition Research*, 7, 37-43.
2. Say, M., Kong, S., Nat, Y., Tan, C. P., & Tan, R. (2024, February). A study on the physicochemical characteristics of popular cooking oils in Cambodia. In IOP Conference Series: Earth and Environmental Science (Vol. 1297, No. 1, p. 012002). IOP Publishing.
3. Oeum, K., Suong, M., Uon, K., Jobert, L., Bellaifiore, S., Comte, A., ... & Moulin, L. (2024). Comparison of plant microbiota in diseased and healthy rice reveals methylobacteria as health signatures with biocontrol capabilities. *Frontiers in Plant Science*, 15, 1468192.
4. Peng, C., Moniroth, S., Khy, P., Chea, S., Thanh, C., Heng, O., ... & Caruso, D. (2024). Antibiotic resistance profiles of sentinel bacteria isolated from aquaculture in Cambodia. *Journal of Water and Health*, 22(6), 1033-1043.
5. Thanh, C., Mith, H., Peng, C., Servent, A., Poss, C., Laillou, A., ... & Avallone, S. (2024). Assessment of the nutritional profiles and potentially toxic elements of wild and farmed freshwater fish in Cambodia. *Journal of Food Composition and Analysis*, 133, 106357.
6. Lay, S., & Houng, P. (2024). Maximizing Yield of Phenolic Compounds Extracted from White Turmeric Through Extraction Process Design. In *Journal of Physics: Conference Series* (Vol. 2671, No. 1, p. 012018). IOP Publishing.
7. Say, M., Heng, P., Kong, S., & Tan, C. P. (2024). Sivchheng Phal, Yukleav Nat, Reasmey Tan. Characterization of Physicochemical Properties of Cooking Oils Sold in Phnom Penh, Cambodia. *Journal of Food Science and Nutrition Research*, 7, 28-36.
8. Rodriguez, C., Mith, H., Taminiau, B., Korsak, N., Garcia-Fuentes, E., & Daube, G. (2023). Microbial Food Safety Assessment of Organic Food and Feed: Notifications in the EU RASFF during 2020–2022. A Systematic Review. *Transboundary and Emerging Diseases*, 2023.
9. Kong, S., Keang, T., Bunthan, M., Say, M., Nat, Y., Tan, C. P., & Tan, R. (2023). Hydraulic Cold-Pressed Extraction of Sacha Inchi Seeds: Oil Yield and Its Physicochemical Properties. *ChemEngineering*, 7(4), 69.
10. Say, M., Kong, S., Nat, Y., Tan, C. P., & Tan, R. (2023). Oil extraction through hydraulic pressing from Cambodian soybean seeds and analysis of its physicochemical quality. *Journal of Food Technology*, 10(4), 93-102.
11. Mich, M., Kong, S., Say, M., Nat, Y., Tan, C. P., & Tan, R. (2023). Optimization of solvent extraction conditions of Cambodian soybean oil using response surface methodology. *Journal of Food Technology Research*, 10(1), 1-10.
12. Uon, K., Sorn, S., Stéphane, B., & Suong, M. (2023, November). The Effects of Soil Microbiomes on Preventing Nematode Damage to Rice Plants. In *Biology and Life Sciences Forum* (Vol. 27, No. 1, p. 49). MDPI.
13. Lay, S., Sen, S., & Houng, P. (2023). Assessment of Bioactive Compounds in Red Peppercorns (*Piper nigrum* L.) for the Development of Red Peppercorns Powder. *ChemEngineering*, 7(5), 83.
14. Chrun, R., Mith, H., Meng, S., Long, S., Born, P., & Inatsu, Y. (2023). Assessing Prevalence and Antibiotic Resistance of *Escherichia coli* and Other Enterobacteriaceae Isolated from Cambodian Fermented Fish and Vegetables. *Japan Agricultural Research Quarterly: JARQ*, 57(4), 311-320.
15. Nguyen, H. T., Vang, S., Phan, N. T., Czernic, P., Trinh, P. Q., Ha, C. V., ... & Bellaifiore, S. (2023). Identification and characterization of a virulent population of *Meloidogyne graminicola*. *Australasian Plant Pathology*, 1-15.

16. Ly, L., Te, C., Chanto, M. T., & Tan, R. (2023). Impact of Different Raw Materials on Changes in Volatile Compounds during Moromi Fermentation. In *Biology and Life Sciences Forum* (Vol. 26, No. 1, p. 103). MDPI.
17. Bunthan, M. ., Say, M. ., Kong, S. ., Nat, Y. ., Tan, C. P. ., & Tan, R. (2023). Oil extraction through hydraulic pressing from Cambodian soybean seeds and analysis of its physicochemical quality. *Journal of Food Technology Research*, 10(4), 93–102. <https://doi.org/10.18488/jftr.v10i4.3545>
18. Choeng, L., Peng, C., Set, L., & Doeurn, S. (2023). Determination of Histamine Level and Its Correlation with Viable Bacterial Count in Cambodian Fermented Fish. *International Journal of Environmental and Rural Development*, 14(1), 52-58.
19. Chor, L., Sroy, S., Peng, C., Doeurn, S. (2023). Process Optimization and Quality Assessment of Nem, a Traditional Cambodian Lactic Acid Fermented Fish Product. *Journal of Food Science and Nutrition Research*, 6 (4)
20. Nget, S., Mith, H., Boué, G., Curet, S., & Boillereaux, L. (2023). The Development of a Digital Twin to Improve the Quality and Safety Issues of Cambodian Pâté: The Application of 915 MHz Microwave Cooking. *Foods*, 12(6), 1187.
21. Houn, P., Ly, K., & Lay, S. (2023). Valorization of kaffir lime peel through extraction of essential oil and process optimization for phenolic compounds. *Journal of Chemical Technology & Biotechnology*. DOI 10.1002/jctb.7354
22. Yin, M., Bohuon, P., Avallone, S., In, S., & Weil, M. (2022). Postharvest treatments of turmeric (*Curcuma longa* L.) in Cambodia-Impact on quality. *Fruits*, 77 (6) : pp. 1-13. <https://doi.org/10.17660/th2022/026>
23. Yin, M., Weil, M., Avallone, S., Maraval, I., Forestier-Chiron, N., Servent, A., ... & Bohuon, P. (2022). Impact of cooking, drying and grinding operations on chemical content, functional and sensorial qualities of *Curcuma longa* L. *Journal of Food Measurement and Characterization*, 1-11.
24. Chin, L, N. Therdthai and W. Ratphitagsanti. (2022). Effect of conventional and microwave cooking conditions on quality and antioxidant activity of Chinese kale (*Brassica alboglabra*). *Applied Food Research*. 2 (1). Article ID 100079. <https://doi.org/10.1016/j.afres.2022.100079>
25. Lorn, S.; Ket, P.; Or, C.; Kong, S.; Um, D.; Aun, S.; Taing, C.; Hang, L. Health Impact Assessment from Rice Straw Production in Cambodia. *Appl. Sci.* 2022, 12, 10276. <https://doi.org/10.3390/app122010276>
26. Chea, C. , Ket, P. , Taing, L. , Kong, S. , Um, D. , Taing, C. , Or, C. , Aun, S. and Hang, L. (2022) Life-Cycle Impact Assessment of Air Emissions from a Cement Production Plant in Cambodia. *Open Journal of Air Pollution*, 11, 85-99. doi: 10.4236/ojap.2022.114007.
27. Hor S., Lechaudel M., Lebrun M., Avallone S., Bugaud C.. (2022). How cold storage influences physicochemical properties of mango cv. 'Kent' according to the density. *Fruits*, 77 (3) : p. 1-11.
28. Siesto, G., Pietrafesa, R., Infantino, V., Thanh, C., Pappalardo, I., Romano, P., & Capece, A. (2022). In Vitro Study of Probiotic, Antioxidant and Anti-Inflammatory Activities among Indigenous *Saccharomyces cerevisiae* Strains. *Foods*, 11(9), 1342. (F : 5.561)
29. DOI: <https://doi.org/10.3390/foods11091342>
30. Richter, J. K., Pietrysiak, E., Ek, P., Dey, D., Gu, B.-J., Ikuse, M., Nalbandian, E., Žak, A., & Ganjyal, G. M. (2022). Extrusion characteristics of ten novel quinoa breeding lines. *Journal of Food Science*, 87, 5349– 5362. <https://doi.org/10.1111/1750-3841.16360>
31. Richter, J. K., Gu, B.- J., Ek, P., Dey, D., Saunders, S. R., & Ganjyal, G. M. (2022). Potential interactions between starch and fruit pomace may impact the expansion ratio of direct expanded extrudates. *Journal of Food Science*, 87, 3513– 3527. <https://doi.org/10.1111/1750-3841.16240>
32. Yin, M., Weil, M., Avallone, S., Lebrun, M., Conejero, G., In, S., & Bohuon, P. Impact of cooking and drying operations on colour, curcuminoids and aroma of *Curcuma longa* L. *Journal of Food Processing and Preservation*, e16643. (IF : 2.190)
33. DOI: <https://doi.org/10.1111/jfpp.16643>

34. Phuong, H., Masse, A., Dumay, J., Vandanjon, L., Mith, H., Legrand, J., & Arhaliass, A. (2022). Enhanced liberation of soluble sugar, protein, and R-phycoerythrin under enzyme-assisted extraction on dried and fresh *Gracilaria gracilis* biomass. *Frontiers in Chemical Engineering*, 21. (IF:4.204)
35. DOI: <https://doi.org/10.3389/fceng.2022.718857>
36. Masson A.S., Vermeire M.L., Leng V., Simonin M., Tivet F., Thi H. N., Brunel C., Suong M., Kuok F., Moulin L., & Bellafore S. (2022). Enrichment in biodiversity and maturation of the soil food web under conservation agriculture is associated with suppression of rice-parasitic nematodes. *Agriculture, Ecosystems & Environment*, 331,107913. (IF : 5.567) DOI:10.1016/j.agee.2022.107913
37. Ek, P., Gu, B.-J., Saunders, S. R., Huber, K., & Ganjyal, G. M. (2021). Exploration of physicochemical properties and molecular interactions between cellulose and high-amylose cornstarch during extrusion processing. *Current Research in Food Science*. 4(June), 588–597. <https://doi.org/10.1016/j.crfs.2021.07.001>
38. Ek P., Gu, B.-J., & Ganjyal, G. M. (2021). Whole seed lentil flours from different varieties (Brewer, Crimson, and Richlea) demonstrated significant variation in their expansion characteristics during extrusion. *Journal of Food Science*. 86(3), 942-951. <https://doi.org/10.1111/1750-3841.15623>
39. Dey, D., Gu, B.-J., Ek, P., Rangira, I., Saunders, S. R., Kiszona, A. M., & Ganjyal, G. M. (2021). Apple pomace pretreated with hydrochloric acid exhibited better adherence with the corn starch during extrusion expansion. *Carbohydrate Polymer Technologies and Applications*. 2, 100089. <https://doi.org/10.1016/j.carpta.2021.100089>
40. Yusoff, A. H., Roslan, N. N., Chang, C. S., Lazim, A. M., Nadzir, M. S. M., Oslan, S. N. H., ... & Tan, R. (2021). Heavy Metals in Marsh Clam (*Polymesoda expansa*) as Bioindicators for Pollution in Industrial and Sand Mining Area of Kelantan River Basin, Malaysia. *Trends in Sciences*, 18(20), 10-10. (IF:0.146)

DOI: <https://doi.org/10.48048/tis.2021.10>
41. Lorn, D., Ho, P. H., Tan, R., Licandro, H., & Waché, Y. (2021). Screening of lactic acid bacteria for their potential use as aromatic starters in fermented vegetables. *International Journal of Food Microbiology*, 350, 109242.
42. Rodriguez, C., Mith, H., Taminiau, B., Bouchafa, L., Van Broeck, J., Soumillion, K., ... & Daube, G. (2021). First isolation of *Clostridioides difficile* from smoked and dried freshwater fish in Cambodia. *Food Control*, 124, 107895.
43. Sroy, S., Arnaud, E., Servent, A., In, S., & Avallone, S. (2021). Nutritional benefits and heavy metal contents of freshwater fish species from Tonle Sap Lake with SAIN and LIM nutritional score. *Journal of Food Composition and Analysis*, 96, 103731.
44. Sroy, S., Arnaud, E., Servent, A., In, S., & Avallone, S. (2021). Nutritional benefits and heavy metal contents of freshwater fish species from Tonle Sap Lake with SAIN and LIM nutritional score. *Journal of Food Composition and Analysis*, 96, 103731.
45. Dey, D., Richter, J.K., Ek, P., Gu, B.-J., & Ganjyal, G.M. (2020). A review of food processing by-products utilization in extrusion processing. *Frontiers (Sustainable Food Systems)*. Vol. 4. Article: 603751. <https://doi.org/10.3389/fsufs.2020.603751>
46. Rangira, I., Gu B.-J., Ek P., & Ganjyal, G.M. (2020). Pea starch exhibits excellent expansion characteristics under relatively lower temperatures during extrusion cooking. *Journal of Food Science*. 85(10), 3333-3344. <https://doi.org/10.1111/1750-3841.15450>
47. Chin, L., N. Therdthai and W. Ratphitagsanti. (2020). Effect of microwave cooking on quality of Thai Riceberry rice (*Oryza sativa* L.). *Journal of Food Quality*. Article ID 4350274. <https://doi.org/10.1155/2020/4350274>
48. Anal, A. K., Perpetuini, G., Petchkongkaew, A., Tan, R., Avallone, S., Tofalo, R., ... & Waché, Y. (2020). Food safety risks in traditional fermented food from South-East Asia. *Food Control*, 109, 106922.

49. Hor, S., Léchaudel, M., Mith, H., & Bugaud, C. (2020). Fruit density: A reliable indicator of sensory quality for mango. *Scientia Horticulturae*, 272, 109548.
50. Morm, E., Ma, K., Horn, S., Debaste, F., Haut, B., & In, S. (2020). Experimental Characterization of the Drying of Kampot Red Pepper (*Piper nigrum* L.). *Foods*, 9(11), 1532.

List of Non-index publications for the last 5 year

1. Soeum, S., Phuong, H., Mom, V., Yong, P., Hor, S., Chin, L., Mith, H (2024). Assessment of proximate chemical composition of Cambodia rice varieties. *Techno-Science Research Journal* Vol 12, 53-60.
2. Ly, H., Phoung, H., Sovann, R., Ek, P., Theng, S., Puth, S., Mith, H (2024). Investigation of the influence of extrusion conditions on Cambodian extruded rice vermicelli. *Techno-Science Research Journal* Vol 12, 19-26.
3. Sovann, R., Mith, H., Ek, P., Ly, H., Phoung, H., Theng, S (2024). Physico-chemical characteristics of rice-based cereal processed by twin-screw extrusion and microwave cooking. *Techno-Science Research Journal* Vol 12, 10-18.
4. Peng, C., Choeng, L., Yoeun, S., Doeurn, S (2023). Evaluation of Histamine Content in Lactic Fermented Fish Product, Nem, by Enzymatic Test Kit. *STI Focus: Science, Technology and Innovation*, 2 (2), 27-31
5. S. Som, M. Buthan, S. Kong, Y. Nat, R. Tan (2023). Oil extraction from soybean seeds through hydraulic pressing and valorization of its by-product. *STI Focus: Science, Technology and Innovation*, 2 (2), 04-17
6. P. Yong, S. Soem, V. Mom, S. Theng, H. Mith (2023). Characterization of physicochemical properties and microbiological quality of Khmer Rice Vermicelli (Num Banhchok) collected in Phnom Penh Capital, Cambodia. *Techno-Science Research Journal* Vol 11, 66-73.
7. S. Khut, O. Heng, C. Peng, D. Caruso. Preliminary study on physicochemical quality and antibiotic-resistant *E. coli* and *Aeromonas* spp. in aquaculture of *Pangasius* in Kampong Thom Province. *Techno-Science Research Journal* Vol 11, 46-52A. Chung, S. Yoeun, S. Chek, C. Chey, T. Sriv, V. Soav, K. Phon (2022). Assessment of pesticide contamination in water sources in the vegetable farms in S'ang Kandal province. *The Bulletin of Cambodian Chemical Society* Vol 13.
8. L. Set, S. Sroy, L. Chor, H. Mith, S. Yoeun, S. Doeurn, C. Thanh, C. Peng* (2022). Chemical and Microbiological Analysis of Traditional Fermented Fish and Meat Products Collected from Battambang, Cambodia. *Techno-Science Research Journal* Vol 10.
9. L. Thourn, C. Phat, M. Suong, S. Sieng, S. Heng, S. Yoeun (2022). Identification of Pesticide Contamination in Water Sources Surrounding Agrochemical-Free Rice Farming in Battambang Province. *Techno-Science Research Journal* Vol 10.
10. P. Chhay, P. Houng, and S. Lay, 2022. Effect of pretreatment on extraction of essential oil from kaffir lime leaves. *Techno-Science Research Journal* Vol 10.
11. S. Song, P. Houng, and S. Lay, 2022. Optimization of extraction conditions for phenolic compounds extracted from Cassumunar ginger (*Zingiber montanum*). *Techno-Science Research Journal* Vol 10.
12. S. Met, P. Houng, P. Ek, P. Yun, and S. Lay, 2022. Drying kinetic and the changes of physicochemical properties and bioactive content of dried tomatoes during hot air drying. *Techno-Science Research Journal* Vol 10.
13. Y. Nat, P. Houng, S. Lay, 2021. Effect of Ultrasound-Assisted Extraction Condition on Extraction of Bioactive Compounds from Khmer White Turmeric (*Curcuma Zedoaria*). *The Bulletin of Cambodian Chemical Society* 12.
14. S. Yoeun, S. Ly, F. Kuok, 2021. Alcohol-Based Hand Rub Analysis by High Performance Liquid Chromatography. *The Bulletin of Cambodian Chemical Society* 12.
15. S. Hoeun, S. Lay, P. Houng, S. In, 2021. Impact of Blanching and Drying on Bioactive Compounds of Black Turmeric. *The Bulletin of Cambodian Chemical Society* 12.

16. S. Lay, P. Houn, S. In, 2021. Effects of Solvent and Time on Extraction of Bioactive Compounds from Cambodia Black Turmeric Using Ultrasound-Assisted Extraction. *Techno-Science Research Journal* 9.
17. M. Yin, S. Heng, S. Rem, L. Chin, 2021. Development of Spicy Sweet Chili Sauce. *Techno-Science Research Journal* 9.
18. M. Yin, W. Ratphitsanti, N. Therdthai, 2021. Changes on Qualities of Gluten-free Chalky Rice Breadstick during Storage. *Techno-Science Research Journal* 9.
19. S. Chuon, M. T. Chanto, R. Tan, C. Peng, 2021. Isolation and Characterization of Lactic Acid Bacteria from Soy-based Products. *Techno-Science Research Journal* 9.
20. Ek, P. & Ganjyal, G.M. (2020). Basics of extrusion processing. In *Extrusion Cooking: Cereal Grains Processing*. Wood Publishing, an imprint of Elsevier, Inc. and Cereals and Grains Association.
21. Ek, P., Kowalski, R.J., & Ganjyal, G.M. (2020). Raw materials behaviors in extrusion processing I. In *Extrusion Cooking: Cereal Grains Processing*. Wood Publishing, an imprint of Elsevier, Inc. and Cereals and Grains Association.
22. Ek, P., Baner, J.M., & Ganjyal, G.M. (2020). Extrusion processing of cereal grains and seeds. In *Extrusion Cooking: Cereal grains processing*, an imprint of Elsevier, Inc. and Cereal and Grains Association.
23. Morantes, G., Ek, P., & Ganjyal, G.M. (2020). Food safety in extrusion processing. In *Extrusion Cooking: Cereal grains processing*, edited by Ganjyal GM, an imprint of Elsevier, Inc. and Cereal and Grains Association.
24. L. Ly, M. T. Chanto, C. Peng, R. Tan, 2020. Market study of soy sauces in Cambodia. *Techno-Science Research Journal*, 2020, Volume 8, 64–68.
25. S. Kai, S. Yeoun, C. Phat, 2020. Analysis of pesticide residues in sediment from Chhnok Tru, Kampong Chhnang using different extraction methods. *Techno-Science Research Journal* 8.
26. D. Vantha, C. Peng, H. Mith, 2020. Detection and susceptibility of antibiotic-resistant *Enterococcus* spp. in fermented and pickled vegetables. *Techno-Science Research Journal* 8.
27. C. Phat, S. Rann, P. Teav, S. Soeung, F. Kuok, E. G. Mariquit, W. Kuriniawan, H. Hinode, 2020. Assessment of pesticide residues in surface water, sediment, and fish from Chhnok Tru, Kampong Chhnang. *Techno-Science Research Journal* 8.
28. S. Hoeun, E. Mom, S. In, 2020. Optimization of white pepper (*Piper nigrum* L.) processing by enzymatic activity. *Techno-Science Research Journal* 8.
29. Kuoch, Th., Khoeurn, K., (2020). Distribution and Ecological Risk of Heavy Metals from Mining Areas: A Case Study in Chong Phlah Village, Chong Phlah Commune, Kaev Seima District, Monduliri Province, Northeast of Cambodia. *Techno-Science Research Journal* 8.
30. V. Phoem, S. Ly, H. Mith, 2020. Cambodian Rice Liquor Development using *Rhizopus oryzae*, *Saccharomyces cerevisiae* and alpha-amylase. *Techno-Science Research Journal* 8.
31. S. Yoeun, 2020. High Performance Liquid Chromatography: Principle and Basic Application. *The Bulletin of Cambodian Chemical Society* 11.
32. P. Ek, F. Kuok, W. Kuriniawan, E. G. Mariquit, H. Hinode, C. Phat, 2020. Preliminary study on chemical pollutants in Tonle Sap Lake, Cambodia. *The Bulletin of Cambodian Chemical Society* 11.
33. R. Kong, S. Lun, P. Kang, C. Soeng, L. Blanchot, S. Kim, M. Leti, B. Fabre, H. Mith, 2020. Optimization of extraction and analysis of physico-chemical properties and chemical compositions of fatty oils extracted from kernel seed of different mango (*Mangifera indica* L.) varieties. *The Bulletin of Cambodian Chemical Society* 11.

List of Conferences for the last 5 year

1. S. Yan, M. Barbier, M. Suong, S. Bellafiore. Identification of cuticle-binding bacteria from *Meloidogyne graminicola* as potential biocontrol agent affecting the pest mobility. The 14th Scientific Day, Institute of Technology of Cambodia, Phnom Penh, Cambodia, 5-6 June 2025.

2. S. Vuth, K. Phan, L. Huoy. Isolation and Characterization of Salmonella Bacteriophages from Chicken Breast Samples in Phnom Penh Markets as a Biocontrol Agent. The 14th Scientific Day, Institute of Technology of Cambodia, Phnom Penh, Cambodia, 5-6 June 2025.
3. V. Vicheth, S. Bellafore, S. Yoeun, S. Sieng, S. Keo. Influence of the Soil Physicochemical Properties on Phka Rumdoul Rice Quality and Yield in Cambodia. The 14th Scientific Day, Institute of Technology of Cambodia, Phnom Penh, Cambodia, 5-6 June 2025.
4. K. Vaphat, P. Houn, K. Ly, S. Nut. Development of Dishwashing Liquid Through Utilization of Various Active Ingredients. The 14th Scientific Day, Institute of Technology of Cambodia, Phnom Penh, Cambodia, 5-6 June 2025.
5. C. Sovann, N. Sreng, H. Mith. Assessment of Antimicrobial Resistance Patterns in Salmonella Isolates from Different Food Matrices in Cambodia. The 14th Scientific Day, Institute of Technology of Cambodia, Phnom Penh, Cambodia, 5-6 June 2025.
6. K. Song, R. Tan, L. Ly, P. Pramuk. Comparing the Quality of Fermented Soy Sauces Made by Using Whole Soybeans and Defatted Soybeans. The 14th Scientific Day, Institute of Technology of Cambodia, Phnom Penh, Cambodia, 5-6 June 2025.
7. S. Sary, C. Phat, S. Bellafore, S. Yoeun. Optimisation of Method Liquid Extraction of Aroma Compound (2-acetyl-1-pyrroline) from Phka Rumdoul Rice Variety. The 14th Scientific Day, Institute of Technology of Cambodia, Phnom Penh, Cambodia, 5-6 June 2025.
8. V. Tit, L. Bun, S. Yoeun, C. Phat. Seasonal Pesticide Residues in Surface Waters of Banteay Meanchey Province, Cambodia. The 14th Scientific Day, Institute of Technology of Cambodia, Phnom Penh, Cambodia, 5-6 June 2025.
9. M. Net, S. Lorn, M. Say, M. Bunthan, N. Tangsuphoom, R. Tan. Development of Oyster Sauce Using Japanese Oysters, Green Mussels, and Clams. The 14th Scientific Day, Institute of Technology of Cambodia, Phnom Penh, Cambodia, 5-6 June 2025.
10. M. Mich, C. Pen, M. Say, C. P. Tan, R. Tan. Development of Blended Cooking Oil For Commercialization in Cambodia. The 14th Scientific Day, Institute of Technology of Cambodia, Phnom Penh, Cambodia, 5-6 June 2025.
11. R. Ly, S. Yoeun, L. Bun, M. Sester, F. Tivet, R. Sry, C. Phat. Assessment of Pesticide Residues in Rice and Irrigation Canal: A Study of Agrochemical-Free Farming in Rovieng District, Preah Vihear Province. The 14th Scientific Day, Institute of Technology of Cambodia, Phnom Penh, Cambodia, 5-6 June 2025.
12. S. Lay, C. Doung, M-L. Scippo, V. Mom, H. Mith, C. Phat. Nutritional Quality of Farmed Striped Snakehead (*C. striata*): Fatty Acid Profile and Proximate Composition Analysis. The 14th Scientific Day, Institute of Technology of Cambodia, Phnom Penh, Cambodia, 5-6 June 2025.
13. S. Huor, P. Ek, S. Sroy. Effects of monoglyceride and guar gum on the quality and sensory properties of mango frozen yogurt. The 14th Scientific Day, Institute of Technology of Cambodia, Phnom Penh, Cambodia, 5-6 June 2025.
14. S. Ho, L. Moulin, M. Suong, K. Oeum, V. Vichet, R. Kong, F. Tivet, M. Adam. Evaluation of rice seed quality of Cambodian varieties produced under conventional and conservation agriculture practices. The 14th Scientific Day, Institute of Technology of Cambodia, Phnom Penh, Cambodia, 5-6 June 2025.
15. A. Heng, C. Phat, L. Bun, M. Sester, F. Tivet, T. Noun, S. Yoeun. Analysis of pesticide residues in rice grains using QuEChERS method follow by GC-MS. The 14th Scientific Day, Institute of Technology of Cambodia, Phnom Penh, Cambodia, 5-6 June 2025.
16. M. Han, K. Khoeurn, P. Houn, M. Mich, S. Meng, M. Sester, F. Tivet. Evaluation of Nutrient Profiles of Single and Mixed Cover Crops Species Collected from Rovieng, Preah Vihear Province. The 14th Scientific Day, Institute of Technology of Cambodia, Phnom Penh, Cambodia, 5-6 June 2025.
17. S. Chea, S. Som, R. Tan. Study on Consumer Preferences and Development of the Sourdough bread-making Process with Added Flavors. The 14th Scientific Day, Institute of Technology of Cambodia, Phnom Penh, Cambodia, 5-6 June 2025.

18. L. Bun, C. Phat, M. Sester, F. Tivet, T. Nuon, S. Yoeun. Assessment of Pesticide Residues in Rice and Water from Kanghot Rice Fields in Battambang. The 14th Scientific Day, Institute of Technology of Cambodia, Phnom Penh, Cambodia, 5-6 June 2025.
19. S. Kiv, S. Sroy, P. Ek. Enhancement of nutritional quality and shelf life of dried fish powder made from Thai river sprat fish (*Clupeoides borneensis*) and striped snakehead fish (*Channa Striata*). The 13th Scientific Day, Institute of Technology of Cambodia, Phnom Penh, Cambodia, 6-7 June 2024.
20. M. Phang, Y. Nat, M. Hun, M. Say. Effect of screw press speed on peanuts oil extraction. The 13th Scientific Day, Institute of Technology of Cambodia, Phnom Penh, Cambodia, 6-7 June 2024.
21. P. Chamreoun, P. Ek, P. Houng. Comparison of drying rates and quality of dried fish (Giant snake head and Snake head fish) using different drying technologies. The 13th Scientific Day, Institute of Technology of Cambodia, Phnom Penh, Cambodia, 6-7 June 2024.
22. S. Hoeun, M. Khit, S. Then, S. Chhorng, S. In. The study on fermented pangasius fish processing. The 13th Scientific Day, Institute of Technology of Cambodia, Phnom Penh, Cambodia, 6-7 June 2024.
23. S. Svay, M. Net, S. Kong, M. Mich, M. Say, A. K. Anal, R. Tan. Development and quality analysis of instant fish Broheu soup formulated from Khmer traditional recipe. The 13th Scientific Day, Institute of Technology of Cambodia, Phnom Penh, Cambodia, 6-7 June 2024.
24. K. Khun, S. Hoeun, C. Lor, C. Heng, S. Y, S. In. Quality change of koh kong green mussels (*Perna viridis*) at different cooking times. The 13th Scientific Day, Institute of Technology of Cambodia, Phnom Penh, Cambodia, 6-7 June 2024.
25. M. Bunthan, M. Net, M. Say, V. Chan, N. Tangsuphoom, R. Tan. Market survey and online survey of commercial oyster sauces sold in Cambodia. The 13th Scientific Day, Institute of Technology of Cambodia, Phnom Penh, Cambodia, 6-7 June 2024.
26. L. Yuok, R. Tan, L. Ly, M. T. Chanto, P. Pramuk. Preliminary study of physicochemical characteristics of black soy sauce by fermentation. The 13th Scientific Day, Institute of Technology of Cambodia, Phnom Penh, Cambodia, 6-7 June 2024.
27. S. Lay, H. Mith, V. Mom, M-L. Scippo, C. Douny, C. Phat. Proximate compositions of farmed and wild *Channa* spp. (*Channa striata* and *Channa micropeltes*). The 13th Scientific Day, Institute of Technology of Cambodia, Phnom Penh, Cambodia, 6-7 June 2024.
28. E. Chan, V. Chan, M. Net, S. Kong, M. Mich, M. Say, A. K. Anal, R. Tan. Studying of three different forms and drying times on fish for making instant fish soup. The 13th Scientific Day, Institute of Technology of Cambodia, Phnom Penh, Cambodia, 6-7 June 2024.
29. P. Ourk, M. Net, S. Kong, M. Mich, M. Say, A. K. Anal, R. Tan. Development of Instant Khor Trey (Instant Caramelized Snakehead) formulated from Khmer traditional recipe. The 13th Scientific Day, Institute of Technology of Cambodia, Phnom Penh, Cambodia, 6-7 June 2024.
30. K. Souk, C. Lor, S. Hoeun, S. In. Observe the effect of blanching durations and drying temperatures on the color and physicochemical properties of dried fish (Trey Riel). The 13th Scientific Day, Institute of Technology of Cambodia, Phnom Penh, Cambodia, 6-7 June 2024.
31. M. Hun, M. Say, M. Phang, Y. Nat. Extraction sesame seed oil through screw press technique. The 13th Scientific Day, Institute of Technology of Cambodia, Phnom Penh, Cambodia, 6-7 June 2024.
32. M. Phang, Y. Nat, M. Hun, M. Say. Effect of screw press speed on peanuts oil extraction. The 13th Scientific Day, Institute of Technology of Cambodia, Phnom Penh, Cambodia, 6-7 June 2024.
33. P. Chhan, M. Mich, K. Theng, Y. Nat. Effect of brine solution period on refined salt quality using hydro-extraction technique. The 13th Scientific Day, Institute of Technology of Cambodia, Phnom Penh, Cambodia, 6-7 June 2024.
34. V. Mom, S. Lay, C. Douny, C. Phat, M-L. Scippo, H. Mith. Observation on smoked fish processing and assessment of Polycyclic Aromatic Hydrocarbon contaminants in Kampong Chhnang province. The 13th Scientific Day, Institute of Technology of Cambodia, Phnom Penh, Cambodia, 6-7 June 2024.
35. K. Nou, V. Mom, C. Douny, C. Phat, S. Yoeun, S. Lay, M-L. Scippo, H. Mith. Assessment of Polycyclic Aromatic Hydrocarbons (PAHs) contamination in smoked fish collected from Orussey

- Market in Phnom Penh. The 13th Scientific Day, Institute of Technology of Cambodia, Phnom Penh, Cambodia, 6-7 June 2024.
36. P. Peuv, M. Suong, S. Meakh, S. Yoeun, C. Phat, S. Sieng, K. Uon. Application of Bandol Pech (*Tinospora crispa*) stem extract as biopesticide against Golden Apple Snail (*Pomacea canaliculata*). The 13th Scientific Day, Institute of Technology of Cambodia, Phnom Penh, Cambodia, 6-7 June 2024.
 37. S. Meakh, M. Suong, P. Peuv, S. Yoeun, C. Phat, S. Sieng, K. Uon. Application of neem (*Azadirachta indica*) leaves crude extract as biopesticide against Golden Apple Snails (*Pomacea canaliculata*). The 13th Scientific Day, Institute of Technology of Cambodia, Phnom Penh, Cambodia, 6-7 June 2024.
 38. S. Sea, M. Pey, S. Sim, C. Say, D. Sang, S. Phal, R. Tan. Comparative study of activated carbon made from fresh and dried cassava peels for diclofenac removal. The 13th Scientific Day, Institute of Technology of Cambodia, Phnom Penh, Cambodia, 6-7 June 2024.
 39. V. Roschhuk, M. Suong, L. Bun, S. Yoeun, C. Phat, S. Sieng, K. Uon, S. Srey. Assessment of pesticide contaminants in vegetables from cooperative farms in Kampong Chhnang and Battambang provinces. The 13th Scientific Day, Institute of Technology of Cambodia, Phnom Penh, Cambodia, 6-7 June 2024.
 40. L. Bun, M. Suong, V. Roschhuk, S. Yoeun, C. Phat, S. Sieng, K. Uon, S. Srey. Assessment of pesticide contaminants in leafy vegetables from different markets in Phnom Penh. The 13th Scientific Day, Institute of Technology of Cambodia, Phnom Penh, Cambodia, 6-7 June 2024.
 41. S. Chhin, P. Ek, P. Houng. Comparison of drying rates and quality of dried fish Catfish (Trey Andeng) using different drying technologies. The 13th Scientific Day, Institute of Technology of Cambodia, Phnom Penh, Cambodia, 6-7 June 2024.
 42. K. Oeum, M. Suong, L. Moulin. Exploration and exploitation of rice microbiome as sustainable agriculture in Cambodia. Transitioning Towards Agroecology and Regenerative Agriculture: A Contribution to Food Systems Transformation (TARASA23), 24 - 27 OCTOBER 2023, Borei Angkor Resort & Spa, SIEM REAP, CAMBODIA.
 43. M. Barbier, C. Perrollaz, J. Aribi, K. Uon, M. Suong, S. Bellafore. Identification of suppressive soils against the plant-parasitic nematode, *Meloidogyne graminicola*: an alternative to the use of pesticides. Transitioning Towards Agroecology and Regenerative Agriculture: A Contribution to Food Systems Transformation (TARASA23), 24 - 27 OCTOBER 2023, Borei Angkor Resort & Spa, SIEM REAP, CAMBODIA.
 44. K. Oeum, M. Suong, L. Moulin. Exploring and exploiting the rice-associated microbiome for Sustainable Rice Farming in Cambodia. 16th plant bacteria meeting, Aussois, March 20 - 24, 2023.
 45. S. Curet, S. Nget, Boug, M. Eshiett, L. Boillereaux. Modelling bacteria inactivation during the steaming process: application to Cambodian pate pasteurization. International Congress on Engineering and Food (ICEF 14), Nantes, France, 20-23 June 2023.
 46. S. Nget, H. Mith, S. Curet, Boillereaux, L. Improvement of Microwave Heating Uniformity by Moving Sliding Short Circuit: Application to 915 MHz Single-Mode Microwave Pasteurization of Solid Food. The 9th International Conference on Microwave and High Frequency Application: AMPERE 2023, Cardiff, UK, 11-14 September 2023.
 47. K. Ly, P. Houng. Extration of bioactive compound from Kaffir lime peel using subcritical water. The 12th Scientific day Day, Institute of Technology of Cambodia, Phnom Penh, Cambodia, 8-9 June 2023.
 48. S. Sen, P. Houng. Determination of yield and bioactive compounds of oleoresin extracted from red pepper and its residues. The 12th Scientific day Day, Institute of Technology of Cambodia, Phnom Penh, Cambodia, 8-9 June 2023.
 49. H. Ly, R. Sovann, H. Mith, H. Phuong. Determination of the composition of different rice varieties collected from local markets in four provinces. The 12th Scientific day Day, Institute of Technology of Cambodia, Phnom Penh, Cambodia, 8-9 June 2023.
 50. D. Pheap, E. Morm, S. In. Study on physicochemical properties, nutritional values, and sensory evaluation of spicy sour seasoning developed from 8 different spices. The 12th Scientific day Day, Institute of Technology of Cambodia, Phnom Penh, Cambodia, 8-9 June 2023.

51. S. Chhunry, P. Houn. Evaluation of the development of physicochemical properties from fresh key lime (*Citrus aurantifolia*) to pickled lime. The 12th Scientific day Day, Institute of Technology of Cambodia, Phnom Penh, Cambodia, 8-9 June 2023.
52. S. Chhoeung, S. Doeurn, C. Penh. Optimization of fish sausage processing methods based on physicochemical quality assessment and consumer acceptability. The 12th Scientific day Day, Institute of Technology of Cambodia, Phnom Penh, Cambodia, 8-9 June 2023.
53. M. Vong, P. Cheng, S. Mao, R. Tan. Production of bacteriocin by Lactic Acid Bacteria for its potential use as natural preservative for fermented cucumbers. The 12th Scientific day Day, Institute of Technology of Cambodia, Phnom Penh, Cambodia, 8-9 June 2023.
54. C. Vireak, S. Kong, M. Say, Y. Nat, R. Tan. Influence of activated bleaching earth on the physicochemical quality of soybean oil. The 12th Scientific day Day, Institute of Technology of Cambodia, Phnom Penh, Cambodia, 8-9 June 2023.
55. S. Toch, S. Mao, L. Ly, R. Tan, M. T. Chanto. Isolation for the desired yeasts from different types of food to improve soy sauce fermentation process and quality. The 12th Scientific day Day, Institute of Technology of Cambodia, Phnom Penh, Cambodia, 8-9 June 2023.
56. S. Hoeun, S. Tin, S. In. Determination of curcuminoids in different types of Freeze-dried Turmeric varieties by HPLC. The 12th Scientific day Day, Institute of Technology of Cambodia, Phnom Penh, Cambodia, 8-9 June 2023.
57. S. Kin, M. Suong, S. Yoeun, C. Phat, K. Uon, P. Sreng, V. Sreng, S. Sieng. Heavy metals analysis in rice grain collected from agrochemical-free paddy fields, Battambang province. The 12th Scientific day Day, Institute of Technology of Cambodia, Phnom Penh, Cambodia, 8-9 June 2023.
58. P. Sreng, M. Suong, S. Yoeun, C. Phat, K. Uon, S. Kin, V. Sreng, S. Sieng. Analysis of heavy metals in soil collected from agrochemical-free paddy fields: a case study at Sangkae district, Battambang Province. The 12th Scientific day Day, Institute of Technology of Cambodia, Phnom Penh, Cambodia, 8-9 June 2023. MA Chiva, Tep Channeath, PENG Chanthol, HENG Oudom, (2023). Identification and Characterization of Lactic acid bacteria isolated from fermented products (Nem Sbak Chrouk) in Battambang province. The 14th International Conference on Environmental and Rural Development at Siem Reap, Cambodia, 3-5 March 2023.
59. Lengheang CHOENG, Chanthol PENG, Leangey SET, and Seyha DOEUN (2023). Determination of Histamine Level and Its Correlation with Viable Bacterial Count in Cambodian Fermented Fish. In The 14th International Conference on Environmental and Rural Development at Siem Reap, Cambodia, 3-5 March 2023.
60. Set LeangEy, Tep Channeath, Peng Chanthol, (2022). Traditional fermented products from Battambang, Cambodia: Their lactic acid bacteria and physicochemical characteristics. In the FOODI International Conference 2022, Nov. 2022.
61. Seyha Doeurn, Channeath Tep, Chanthol Peng, Oudom Heng, LeangEy Set, (2022). Diversity of Lactic Acid Bacteria Isolated from Nem Trey, A Traditional Fermented Fish Product of Cambodia. In the FOODI International Conference 2022, Nov. 2022.
62. Y. Nat, L. Vorleak, K. Tongor, S. Kong, S. Manit, C.P. Tan, R. Tan (2022). Effect Of Different Extraction Techniques On Yield And Physicochemical Properties Of Sacha Inchi Oil. Foodi International Conference 2022 (FOODI 2022), Universiti Teknologi Malaysai, Kuala Lumpur, Malaysia, 07-09 November, 2022.
63. S. Kong, V. Chanthay, P. Heng, M. Say, Y. Nat, C.P. Tan, R. Tan (2022). Evaluating Shelf-Life Of Commercial Soybean Oil Using An Empirical Modelling: A Case Study In Phnom Penh, Cambodia. Foodi International Conference 2022 (FOODI 2022), Universiti Teknologi Malaysai, Kuala Lumpur, Malaysia, 07-09 November, 2022.
64. M. Bunthan, S. Kong, T. Keang, M. Say, Y. Nat, T. Chin Ping, R. Tan (2022). Soybean oil extraction by hydraulic pressing. 6th International Conference of Chemical Engineering & Industrial Biotechnology (ICCEIB 2022), Universiti Malaysia Pahang, Malaysia, 15-16 August 2022.

65. Y. Nat, V. Leng, M. Say, S. Kong, T.C. Ping, R. Tan. Application of Response Surface Methodology on Extraction of Sacha Inchi Oil Using Conventional Solvent Extraction. 6th International Conference of Chemical Engineering & Industrial Biotechnology (ICCEIB 2022), Universiti Malaysia Pahang, Malaysia, 15-16 August 2022.
66. S. Kong, T. Keang, M. Bunthana, M. Say, Y. Nat, T. Chin Ping, R. Tan (2022). Effect of pressure and pressing time on oil yields of sachu inchi using hydraulic cold-pressed extraction. 6th International Conference of Chemical Engineering & Industrial Biotechnology (ICCEIB 2022), Universiti Malaysia Pahang, Malaysia, 15-16 August 2022.
67. S. Lay and P. Houn, 2022. Effect of pickling on bioactive compounds variation of lime. Foodi International Conference 2022, Kuala Lumpur, Malaysia 07-09 November, 2022.
68. K. Ly, P. Houn and S. Lay, 2022. Determination of essential oils content for development of herb and spice powders. Foodi International Conference 2022, Kuala Lumpur, Malaysia 07-09 November, 2022.
69. S. Sen, P. Houn and S. Lay, 2022. Effect of extraction of essential oil on aromatic compounds of red pepper powder. Foodi International Conference 2022, Kuala Lumpur, Malaysia 07-09 November, 2022.
70. S. Lay, and P. Houn, 2022. Maximizing yield of phenolic compounds extracted from white turmeric through extraction process design. 2022 International Conference on Functional Material and Chemical Engineering (ICFMCE, 2022), Nanjin, China 23-25 September, 2022.
71. K. Ly, S. Lay, and P. Houn, 2022. Valorization of kaffir lime peel waste through extraction of phenolic compounds and process optimization. 6th International Conference of Chemical Engineering and Industrial Biotechnology (ICCEIB 2022), Pahang Darul Makmur, Malaysia 15-16 August 2022.
72. S. Sen, S. Lay, and P. Houn, 2022. Effects of solvent extraction condition on yield of phenolic compounds from red pepper (*piper nigrum* L.). 6th International Conference of Chemical Engineering and Industrial Biotechnology (ICCEIB 2022), Pahang Darul Makmur, Malaysia 15-16 August 2022.
73. Thourn, L., Yoeun, S. Phat, C. Suong, M., 2022. Analytical Methods For Pesticide Residues in Paddy Rice and Soil Using Gas Chromatography Mass Spectrometry (GC-MS): A Review. The 11th Scientific Day, Institute of Technology of Cambodia, Phnom Penh, Cambodia.
74. L. Thourn, C. Phat., M. Suong (2021). Assessment of Extraction Technique of Natural Compounds of Plant Origin for Nematicidal Properties: A Review. The 10th Scientific Day of ITC, Institute of Technology of Cambodia, Phnom Penh, Cambodia.
75. Yusoff, A. H., Azmi, M. S. W., Chang, C. S., Sulaiman, A. F., Nor, A. N. M., Tan, R., & Ahmed, M. F. (2021, August). Vertical distribution of heavy metals in core sediments from Kelantan River off Tanah Merah, Kelantan, Malaysia. In *IOP Conference Series: Earth and Environmental Science* (Vol. 842, No. 1, p. 012037). IOP Publishing.
76. S. Lay, P. Houn, 2021. Optimization of Ultrasound-Assisted Extraction of Phenolic Compounds from Cambodia Black Turmeric. *14th AUN/SEED-Net Regional Conference on Chemical Engineering 2021 (RCChE2021), In Conjunction with 1st International Conference on Innovation in Chemical Engineering & Technology (ICICET 2021)*, Selangor, Malaysia.
77. S. Sieng, L. Thourn, S. Sorn, T. Va, K. Tho, S. Bellafiore, M. SUONG, 2021. Current status of the Rice Root-Knot Nematode in Cambodian rice fields and management approaches. *The 3rd National Research Forum*, Phnom Penh, Cambodia.
78. T. Or, M. Lim, D. Sang, M. T. Chanto, R. Tan, 2021. Improving Removal Efficiency of Natural Organic Matter from Drinking Water Treatment Plant by Powder Activated Carbon Injection in Coagulation Process. *The 6th International Symposium on Conservation and Management of Tropical Lakes, In Conjunction with The 3rd International Conference on Tropical Limnology (TROPLIMNO III)*, Phnom Penh, Cambodia.
79. L. Meak, S. Khoun, T. Mao, C. Phat, 2021. Assessment of Pesticides Residue in Groundwater in Kampong Thom, Cambodia. *The 6th International Symposium on Conservation and Management of Tropical Lakes, In Conjunction with The 3rd International Conference on Tropical Limnology (TROPLIMNO III)*, Phnom Penh, Cambodia.

80. S. Yoeurm, S. Khuon, C. Phat, S. Yeoun, 2021. Assessment of Pesticides Residues in the Farm Soils and Sediment from Chhnok Tru, Kampong Chhnang. *The 6th International Symposium on Conservation and Management of Tropical Lakes, In Conjunction with The 3rd International Conference on Tropical Limnology (TROPLIMNO III)*, Phnom Penh, Cambodia.
81. V-D. Pham, S. In, S. Sroy, M. Soeung, M. Nishiyama, S. Heng, H. Mith, S. Nget, T. Watanabe, 2021. Assessment of Heavy Metal(loid) Accumulation and Sources in Six Edible Fish Species of Tonle Sap Lake, Cambodia. *The 6th International Symposium on Conservation and Management of Tropical Lakes, In Conjunction with The 3rd International Conference on Tropical Limnology (TROPLIMNO III)*, Phnom Penh, Cambodia.
82. C. Phat, S. Yoeun, M. Ouk, K. Kun, F. Kuok, B. Ty, W. Kurniawan, E. G. Mariquit, H. Hinode, 2021. Assessment of pesticide contamination in vegetable and water from Chhnok Tru floating communities of Tonle Sap Lake. *The 35th Congress of the International Society of Limnology (SIL2021)*, Gwangju, Republic of Korea.
83. R. Tan, C. Be, C. Peng, P. Ung, K. Miyanaga, Y. Tanji, 2021. Investigation of Multidrug-Resistant Bacteria in Tonle Sap Lake, Tonle Sap River, Mekong River, and Wastewater. *The 35th Congress of the International Society of Limnology (SIL2021)*, Gwangju, Republic of Korea.
84. P. Ung, K. Seang, S. Keo, R. Tan, K. Miyanaga, Y. Tanji, 2021. Assessment of Microbiological Water Quality in Tonle Sap River and Kob Srov Lake in Phnom Penh, Cambodia. *The 35th Congress of the International Society of Limnology (SIL2021)*, Gwangju, Republic of Korea.
85. S. Sok, P. Thach, K. Miyanaga, R. Tan, 2020. Development of a Package Containing PAC and $\text{Ca}(\text{OCl})_2$ for Drinking Water Treatment of Lake Water. *The 13th AUN/SEED-Net Regional Conference on Chemical Engineering 2020 (RCChE-2020), Jointly held with The 5th International Symposium on Conservation and Management of Tropical Lakes*, Phnom Penh, Cambodia.
86. S. In, S. Nget, S. Heng, D. V. Pham, M. Nishiyama, H. Mith, T. Watanabe, 2020. Bioaccumulation of heavy metals and trace elements in six fish species from Tonle Sap Lake, Cambodia. *The 13th AUN/SEED-Net Regional Conference on Chemical Engineering 2020 (RCChE-2020), Jointly held with The 5th International Symposium on Conservation and Management of Tropical Lakes*, Phnom Penh, Cambodia.
87. T. Yann, K. Miyanaga, R. Tan, 2020. The effectiveness of different types of polyaluminum chloride (PAC) and aluminum sulfate (alum) with $\text{Ca}(\text{OCl})_2$ dosing for treatment surface water of Tonle Sap River. *The 13th AUN/SEED-Net Regional Conference on Chemical Engineering 2020 (RCChE-2020), Jointly held with The 5th International Symposium on Conservation and Management of Tropical Lakes*, Phnom Penh, Cambodia.
88. C. Phat, K. Kun, V. Pheap, S. Yoeun, E. G. Mariquit, W. Kuriniawan, H. Hinode, 2020. Assessment of Pesticide Residues in Surface Water and Fish from Chhnok Tru, Kampong Chhnang. *The 13th AUN/SEED-Net Regional Conference on Chemical Engineering 2020 (RCChE-2020), Jointly held with The 5th International Symposium on Conservation and Management of Tropical Lakes*, Phnom Penh, Cambodia.
89. K. Ngoun, G. Chhun, R. Tan, 2020. Optimization of Young Mango Fermentation and Effect of Different Preservation Methods on its Shelf-life. *The 13th AUN/SEED-Net Regional Conference on Chemical Engineering 2020 (RCChE-2020), Jointly held with The 5th International Symposium on Conservation and Management of Tropical Lakes*, Phnom Penh, Cambodia.
90. C. Nong and S. In, 2020. The effect of blanching on curcumin content and chemical composition of essential oils of dried Turmeric (*Curcuma longa*). *The 13th AUN/SEED-Net Regional Conference on Chemical Engineering 2020 (RCChE-2020), Jointly held with The 5th International Symposium on Conservation and Management of Tropical Lakes*, Phnom Penh, Cambodia.
91. S. Hoeun, S. Meas, E. Morm, S. In, 2020. Production of White Pepper from Ripe Pepper Berries (*Piper nigrum* L.). *The 13th AUN/SEED-Net Regional Conference on Chemical Engineering 2020 (RCChE-*

- 2020), *Jointly held with The 5th International Symposium on Conservation and Management of Tropical Lakes*, Phnom Penh, Cambodia.
92. M. Net, D. Dim, R. Tan, 2020. Development of Fermented Small Cucumbers with Different Tastes Using Isolated Lactic Acid Bacteria. *The 13th AUN/SEED-Net Regional Conference on Chemical Engineering 2020 (RCChE-2020), Jointly held with The 5th International Symposium on Conservation and Management of Tropical Lakes*, Phnom Penh, Cambodia.
 93. T. Kong, S. Hean, R. Tan, 2020. Development of Fermented Young Melon using Isolated Lactic Acid Bacteria. *The 13th AUN/SEED-Net Regional Conference on Chemical Engineering 2020 (RCChE-2020), Jointly held with The 5th International Symposium on Conservation and Management of Tropical Lakes*, Phnom Penh, Cambodia.
 94. C. Sam, S. Nget, S. Heng, S. In, M. Nishiyama, T. Watanabe, H. Mith, 2020. Determination of Antibiotic Resistance of Enterococcus spp. Isolated from Drinking Water Collected from Stoung District. *The 13th AUN/SEED-Net Regional Conference on Chemical Engineering 2020 (RCChE-2020), Jointly held with The 5th International Symposium on Conservation and Management of Tropical Lakes*, Phnom Penh, Cambodia.
 95. B. Bun, S. Nget, S. Heng, S. In, N. Maseteru, T. Watanabe, H. MitH, 2020. Investigation on Antibiotic Resistance of Escherichia coli Isolated from Drinking Water Collected in Stoung District. *The 13th AUN/SEED-Net Regional Conference on Chemical Engineering 2020 (RCChE-2020), Jointly held with The 5th International Symposium on Conservation and Management of Tropical Lakes*, Phnom Penh, Cambodia.
 96. S. Sat, S. Nget, S. Heng, S. In, M. Nishiyama, T. Watanabe, H. Mith, 2020. Study on Antibiotic Resistance of Pseudomonas aeruginosa Isolated from Drinking Water Collected from Three communes in Kampong Thom Province. *The 13th AUN/SEED-Net Regional Conference on Chemical Engineering 2020 (RCChE-2020), Jointly held with The 5th International Symposium on Conservation and Management of Tropical Lakes*, Phnom Penh, Cambodia.
 97. S. Phuong, M. T. Chanto, C. Peng, K. Miyanaga, R. Tan, 2020. Detection of Antibiotic-Resistant Bacteria in Water Environment of Tonle Sap Area and Wastewater. *The 13th AUN/SEED-Net Regional Conference on Chemical Engineering 2020 (RCChE-2020), Jointly held with The 5th International Symposium on Conservation and Management of Tropical Lakes*, Phnom Penh, Cambodia.
 98. L. Ly, M. T. Chanto, C. Peng, R. Tan, 2020. Price Evaluation and Quality Control of Different Soy Sauces Sold in the Markets. *The 13th AUN/SEED-Net Regional Conference on Chemical Engineering 2020 (RCChE-2020), Jointly held with The 5th International Symposium on Conservation and Management of Tropical Lakes*, Phnom Penh, Cambodia.

Annex 43. List of publication for the last 5 years from MIT Research Unit.

List of indexed publications from 2020

1. Pliaodee, C., Madsahi, P., Songsan, K., Inthasuth, T., Boonsong, W., & Hel, C. (2024). Internet of Things sensor placement: Impacts on energy management system data integrity. 2024 International Technical Conference on Circuits/Systems, Computers, and Communications (ITC-CSCC), Okinawa, Japan, 1-5. <https://doi.org/10.1109/ITC-CSCC62988.2024.10628169>
2. Bun, M., Chrin, P., Kim, B., Azzaro-Pantel, C., & Maussion, P. (2024). Life cycle assessment of e-tuk-tuk using second life components and renewable energy. SDEWES 2024, Rome, Italy.
3. Kuy, M., Schumacher, L., & Sreng, S. (2024). Managing and orchestrating cross-cloud VNFs with deployable sidecar VNF coordinators. NetSoft 2024.
4. Nhim, C. S., Chek, N., Hel, C., & Pec, R. (2023). Experiment on smart mushroom cultivation using an environmental control system. Environmental and Rural Development, 144.
5. Kean, J., Raveu, N., Kaouach, H., Sreng, S., & Thourn, K. (2023). Analysis and characterization of electromagnetic reverberation chamber with metamaterial walls. 3rd IEEE International Conference on Signal, Control and Communication (SCC 2023).
6. Kumar, K. D., Srang, S., & Valy, D. (2023). Visual storytelling: A generative adversarial networks (GANs) and graph embedding framework. International Journal on Recent and Innovation Trends in Computing and Communication, 11(9), 1899–1906. (Scopus Indexed).
7. Keo, C., Srang, S., & Seng, R. (2023). Performance investigation of low-cost dual-axis solar tracker using light dependent resistor. International Journal of Robotics & Control Systems, 3(4).
8. Kumar, K. D., Srang, S., & Valy, D. (2023). Evaluating text-to-image GANs performance: A comparative analysis of evaluation metrics. International Journal on Recent and Innovation Trends in Computing and Communication, 11(8s), 618–627. (Scopus Indexed).
9. Kuy, M., Schumacher, L., & Sreng, S. (2023). Experimental demonstration of NFV deployment with RPi and MAAS. NetSoft 2023. IEEE.
10. Nhim, C. S., Chek, N., Hel, C., & Pec, R. (2023). Experiment on smart mushroom cultivation using the environmental control system. 14th International Conference on Environmental and Rural Development, Siem Reap, Cambodia.
11. Chhorn, S., Tep, S., Hel, C., & Pec, R. (2022). Development of ESP32-based smart greenhouse controller. IEEE IoT World Forum.
12. Born, S., Valy, D., & Kong, P. (2022). Encoder-decoder language model for Khmer handwritten text recognition in historical documents. 14th International Conference on Software, Knowledge, Information Management and Applications (SKIMA), IEEE, 234-238.
13. Kumar, K. D., Srang, S., & Valy, D. (2022). A review of generative adversarial networks (GANs) for technology-assisted learning: Solving teaching and learning challenges. International Conference on Automation, Computing and Renewable Systems (ICACRS), IEEE, 820-826.
14. Siv, R., Mancas, M., Gosselin, B., Valy, D., & Sreng, S. (2022). People tracking and re-identifying in distributed contexts: Extension study of PoseTReID. 9th International

- Conference on Electrical Engineering, Computer Science and Informatics (EECSI), IEEE, 337-342.
15. Kong, P., Mancas, M., Gosselin, B., & Po, K. (2022). DeepRare: Generic unsupervised visual attention models. *Electronics*, 11(11), 1696. <https://doi.org/10.3390/electronics11111696>
 16. Nhim, C. S., Hel, C., Chhorn, S., Tep, S., & Pec, R. (2022). Development of multi-parameter tester for agricultural application. 9th International Conference on Information Technology, Computer, and Electrical Engineering.
 17. Sok, K., Colin, J. N., & Po, K. (2022). Multi-authority decentralized attribute-based authorization framework. In Horkoff, J., Serral, E., & Zdravkovic, J. (Eds.), *Advanced Information Systems Engineering Workshops (CAiSE 2022)*, Lecture Notes in Business Information Processing (Vol. 451). Springer, Cham. https://doi.org/10.1007/978-3-031-07478-3_2
 18. Chea, R., Thourn, K., & Chhorn, S. (2022). Improving V-I trajectory load signature in NILM approach. IEECON 2022, Thailand.
 19. Kean, J., Raveu, N., Kaouach, H., Thourn, K., & Sreng, S. (2021). Analysis of metamaterial walls reverberation chamber by using modal expansion theory. *Asia-Pacific International Symposium on Electromagnetic Compatibility (APEMC)*, IEEE, 1-4.
 20. Chin, C. D., Hel, C., & Pec, R. (2021). Fab Lab initiative in higher education: Digital solutions diverted to traditional farming in Cambodia context. 6th International STEM Education Conference (iSTEM-Ed), IEEE.
 21. Peuo, T., Yean, S., Sathy, B., & Srang, S. (2021). PD controller and dynamic compensation design for a DC motor based on estimated parameters. *International Conference on Advanced Mechatronics, Intelligent Manufacture and Industrial Automation (ICAMIA)*, Indonesia.
 22. Srey, S., Chhour, V., & Srang, S. (2021). Lumped parameter estimation of a low-cost DC motor for position controller design. *International Conference on Advanced Mechatronics, Intelligent Manufacture and Industrial Automation (ICAMIA)*, Indonesia.
 23. Ban, S., Dan, A., Guinet, F., Portanguen, J., Srang, S., & Lauras, M. (2021). Assessing the potentialities of physical internet for developing countries' last-mile deliveries. 8th International Physical Internet Conference (IPIC 2021), Germany.
 24. Thavath, S., Proeung, B., Tep, S., Chhorn, S., Pec, R., Nall, V., Ket, P., Oeurng, C., & Hel, C. (2021). Prototyping of smart irrigation system using IoT technology. 7th International Conference on Electrical, Electronics and Information Engineering (ICEEIE), IEEE.
 25. Mancas, M., Kong, P., & Gosselin, B. (2020). Visual attention: Deep rare features. 9th International Conference on Informatics, Electronics & Vision (ICIEV) and 4th International Conference on Imaging, Vision & Pattern Recognition.
 26. Ban, S., Lauras, M., & Srang, S. (2020). Toward physical internet-enabled supply chain and logistics networks in developing countries. 21st IFIP/SOCOLNET Working Conference on Virtual Enterprises (PRO-VE), Spain.
 27. Berthet, M., et al. (2020). Student-led policy and technical capacity building program: The road to Cambodia's first CubeSat. 71st International Astronautical Congress (IAC).
 28. Srang, S., Ath, S., & Yamkita, M. (2020). Newton-Euler based dynamic modeling and control simulation for dual-axis parallel mechanism solar tracker. *Advances in Science, Technology and Engineering Systems Journal*, 5(5), 709-716.

29. Vai, V., Chhorn, S., Chhim, R., Tep, S., & Long, B. (2020). Modeling and simulation of PV module for estimating energy production under uncertainties. 8th International Electrical Engineering Congress (iEECON), IEEE.
30. Valy, D., Verleysen, M., & Chhun, S. (2020). Data augmentation and text recognition on Khmer historical manuscripts. 17th International Conference on Frontiers in Handwriting Recognition (ICFHR), IEEE, 73-78.

List of non-indexed publications from 2020

1. Pork, C., Valy, D., & Phauk, S. (2024). Text image reconstruction and reparation for Khmer historical document. Techno SRJ.
2. Nom, V., Valy, D., Phauk, S., & Leng, S. H. (2024). Word spotting on Khmer palm leaf manuscript documents. Techno SRJ.
3. Korn, V., Sok, K., & Valy, D. (2024). Enhancing the accuracy and reliability of Docker image vulnerability scanning technology. Techno SRJ.
4. Srey, S., & Srang, S. (2024). Comparison of control performance for a low-cost DC motor with single-loop and cascade control architectures. Techno SRJ.
5. Chun, D., Thourn, K., & Sreng, S. (2024). Design of multi-layer planar electromagnetic wave absorber using 1D-FDTD integrated with ASA and gradient descent optimization method. Techno SRJ.
6. Ny, S., Valy, D., & Kong, P. (2023). Lock and unlock door with face detection using OpenCV, Python, and Arduino board. Techno SRJ.
7. Than, S., Valy, D., & Kong, P. (2023). Crop disease dataset and recognition using convolutional neural networks. Techno SRJ.
8. Chheang, V. R., Valy, D., & Tith, D. (2023). Decentralized blockchain-based PKI for patient identification in the blockchain network. Techno SRJ.
9. Samrit, C., Srang, S., & Yonrith, P. (2023). Study on mechanical structure design for plug-and-play wheel mobile robot. Techno SRJ.
10. Gnhiok, P., Srang, S., & Yonrith, P. (2023). PI controller for velocity controller design based on Luraped parameter estimation: Simulation and experiment. Techno SRJ.
11. Yi, V., Srang, S., & Keo, C. (2023). Attitude estimation by using unscented Kalman filter with constraint state. Techno SRJ.
12. Leng, S. H., Phauk, S., & Has, S. (2023). An empirical investigation of gold price forecasting using ARIMA compared with LSTM model. Techno SRJ.
13. Chou, M., & Thourn, K. (2023). Non-intrusive load monitoring classification based on multi-scale electrical appliance load signature. Techno SRJ.
14. Eang, K., Phauk, S., Has, S., & Din, S. (2023). The study of cereals price prediction in terms of trade flows for anticipated price fluctuations in Cambodia by using ARIMA model. Techno SRJ.
15. Seng, R., & Srang, S. (2023). Development of control framework based on ROS platform for a 3-axis gimbal. Techno SRJ.
16. Oum, S., Srang, S., & Yonrith, P. (2022). Integration of RRT* path planning with trajectory tracking for wheeled mobile robot. Techno-Science Research Journal.
17. Srean, P., Sakal, M., Berthet, M., & Srang, S. (2022). Development of orbital simulator for Cambodian CubeSat mission in LEO. Techno-Science Research Journal.
18. Siek, S. A., & Srang, S. (2021). Design and prototyping of solar hybrid switch controller and monitoring system. Techno-Science Research Journal.
19. Yonrith, P., Srang, S., Sakal, M., & Sethy, B. (2021). Mobile robot localization using extended Kalman filter with kinematic model. Techno-Science Research Journal.
20. Tim, H., Srang, S., & Sakal, M. (2021). Simulation and numerical characterization of gaseous oxygen injector for ABS/GOX hybrid rocket motor. Techno-Science Research Journal.

21. Chao, V., Srang, S., Sakal, M., & Keo, C. (2021). Helipad detection for UAV based on YOLOv4 transfer learning model. *Techno-Science Research Journal*.
22. Srang, S., Taing, N., & Kuok, F. (2021). Policy brief: Minimum pre-requisite for creating high-tech and deep-tech startup ecosystem in Cambodia. *Asian Vision Institute*.
23. Soun, D., Sakal, M., Sor, H., & Srang, S. (2021). Design and implementation of the commercial-off-the-shelf electrical power system for the satellite training kit – DemoSat. *Techno-Science Research Journal*.
24. Keo, C., Srang, S., & Van, D. (2020). Modeling and simulation at the equilibrium of fixed-wing unmanned aerial vehicle. *Techno-Science Research Journal*.
25. Sethy, B., Srang, S., & Van, D. (2020). Pose estimation for differential drive mobile robot using multi-sensor data fusion. *Techno-Science Research Journal*.
26. Mork, T., Srang, S., & Van, D. (2020). Simultaneous localization and mapping using Intel RealSense camera. *Techno-Science Research Journal*.
27. Ly, L., Srang, S., & Van, D. (2020). Modeling, control, and simulation on 3DOF robot manipulator. *Techno-Science Research Journal*.
28. Lim, B., Srang, S., & Van, D. (2020). Development of IoT smart controller: Case study for the gravity irrigation system. *Techno-Science Research Journal*.
29. Tem, L., & Srang, S. (2020). CNC-mill construction and automatic control to shape the specimen by CAD/CAM. *Techno-Science Research Journal*.

List of Conferences from 2020

1. Chheang, R., Srang, S., & Srey, S. (2025, June). Model-Based PMSM Control in the dq Frame Using Full-State Feedback with Integral Action and EKF for State Estimation under Stochastic Dynamics. *The 14th Scientific Day*.
2. Chhorn, D., Phauk, S., Carlitti, T., & Nhim, M. (2025, June). Reconstructing Higher-Order Interaction in Algal Communities. *The 14th Scientific Day*.
3. Em, D. (2025, June). Predictive Modeling of Garment Trade Flows in Cambodia: A Data-Driven Approach to Forecasting Export Trends. *The 14th Scientific Day*.
4. Has, S., Plougonven, R., Fischer, A., Rani, R., Lott, F., Hertzog, A., & Podglajen, A. (2025, June). Balloon-observed Gravity Wave Momentum Flux Reconstruction using Transfer Learning Bayesian Neural Network. *The 14th Scientific Day*.
5. Hort, H., Phauk, S., Neang, P., & Khean, V. (2025, June). KHR/USD Daily Exchange Rate Short Term Prediction using Deep Learning. *The 14th Scientific Day*.
6. Koum, S., Ngin, K., Phao, C., Bo, S., & Ma, O. (2025, June). A Multilingual Deep Learning Approach Fine-Tuning to Khmer News Summarization. *The 14th Scientific Day*.
7. Leang, P. I. N., Ly, L., Phorn, S., Ly, S., & Ngeth, R. (2025, June). Continuously Uploading ECG Waveform Data to Google Sheet using ESP32. *The 14th Scientific Day*.
8. Leng, P., Phauk, S., Nhim, M., & Tann, C. (2025, June). Comparing Time Series, Machine Learning, and Deep Learning Models for Paddy Rice Price Forecasting in Battambang Province, Cambodia. *The 14th Scientific Day*.
9. Li, N., Heng, S., Seng, L., Moon, J., Phauk, S., & Hong, C. (2025, June). Enhancing Khmer Language AI: A Privacy-Focused Chatbot with Retrieval-Augmented Generation. *The 14th Scientific Day*.
10. Ly, T., Phauk, S., Has, S., & Valy, D. (2025, June). Uncovering Factors Contributing to Cambodian High School Students' Mathematics Achievement through Machine Learning Algorithms. *The 14th Scientific Day*.
11. Ngin, K., Valy, D., Phoeurn, K., Va, S., Pel, B., Ty, K., Yin, S., & Pho, R. (2025, June). Handwritten Khmer Digit Recognition Using Sequential RNN Models. *The 14th Scientific Day*.
12. Pen, C., Phauk, S., Has, S., & Valy, D. (2025, June). Harnessing Predictive Analytic for Detecting Students' Learning and Behavioral Engagement in Moodle Platform. *The 14th Scientific Day*.

13. Seun, S., Phauk, S., Ngim, K., & Long, P. (2025, June). Analysis on Machine Learning Models for Imbalanced Data Problem in Payment Fraud Detection. The 14th Scientific Day.
14. Sithach, T., Phauk, S., Has, S., & Phok, P. (2025, June). The Forecasting for Cambodia's Rice Production Using Multiple Linear Regression and Tree-Based Ensemble Learning Methods. The 14th Scientific Day.
15. Sok, S., Thourn, K., & Po, K. (2025, June). Toward a Case Study on Event Detection in Non-Intrusive Load Monitoring Using Geometric Features of the Cumulative Sum. The 14th Scientific Day.
16. Songeam, S., Valy, D., & Has, S. (2025, June). AI-Based Skill Trend Analysis: Enhancing Job Market Insights and Curriculum Development in Cambodia. The 14th Scientific Day.
17. Soeng, P., Valy, D., & Kong, P. (2025, June). Applying Deep Learning Approaches to Khmer Speech Recognition and Text-to-Speech in Conversational Domains. The 14th Scientific Day.
18. Sreyvi, U. (2025, June). Interacting Neural Networks: A Comparative Study of Standard and Distributed Architectures on Image Classification. The 14th Scientific Day.
19. Taing, B. (2025, June). Investigating Efficiency of PMSM Using Full State Feedback Control with integral action and Dynamic Compensation. The 14th Scientific Day.
20. Yann, S., Valy, D., & Kong, P. (2025, June). Lip-Synchronized Talking Avatar Generation for Khmer Language Using Audio-to-Landmark Modeling. The 14th Scientific Day.
21. Bunrong, P., Thourn, K., & Chhorn, S. (2025, June). Development of Low-Cost CSRR-Based Sensor for Soil Moisture Monitoring in Agriculture. The 14th Scientific Day.
22. Houn, S., Hang, M., Hun, S., Chhouk, P., & Choeurn, B. (2025, June). PREDICTING LIKELIHOOD OF DIABETES USING MACHINE LEARNING TECHNIQUES. The 14th Scientific Day.
23. Khean, V., Phauk, S., & Nam, Y. (2025, June). Enhancing Facial Emotion Classification and Recognition in VR Environments Using Machine Learning. The 14th Scientific Day.
24. Kleng, V., Am, S., Bun, M., Phon, L., & Gyselinck, J. (2025, June). Modification of a DC/DC Forward Converter to a DC/AC Inverter Based on Second-Life Computer Power Supplies for Replacing Smooth Sine wave Solar Inverter. The 14th Scientific Day.
25. Luk, C., Phouak, S., & Has, S. (2025, June). Time Series and Deep Learning Models for Weekly PM2.5 Forecasting: A Comparative Study in Bangkok, Thailand. The 14th Scientific Day.
26. Minh, M. H., Srang, S., & Tang, S. B. (2025, June). Development and Evaluation of a Reinforcement Learning Framework for Autonomous Land Leveling Path Planning. The 14th Scientific Day.
27. Sou, S., & Valy, D. (2025, June). Conversational Chatbot in Khmer, Backed by a Knowledge Base. The 14th Scientific Day.
28. Thourn, K., & Chhorn, S. (2025, June). Improving the Navigation performance based on low-cost IMU sensor Array Through Data Fusion Estimation and Error Compensation Method. The 14th Scientific Day.
29. Rey, E., Ngim, K., & Phauk, S. (2024). Web application using deep learning approaches for automated prediction of tomato leaf disease. Life Mechatronics Symposium (LMS2024).
30. Sou, S., & Valy, D. (2024). Conversational chatbot in Khmer. Life Mechatronics Symposium (LMS2024).
31. Songeam, S., & Valy, D. (2024). Analysis of online job recruitments to identify industry's trending skills for designing market-aligned curriculum. Life Mechatronics Symposium (LMS2024).
32. Yann, S., & Valy, D. (2024). Audio2Video: Advancing generative AI for realistic virtual person creation. Life Mechatronics Symposium (LMS2024).
33. Soeng, P., & Valy, D. (2024). Khmer speech recognition and text-to-speech. Life Mechatronics Symposium (LMS2024).
34. Ngim, K., Valy, D., & Oeng, S. (2024). Handwriter identification from Khmer script using multiple features with deep learning approach. Life Mechatronics Symposium (LMS2024).
35. Ly, K., Leang, P. I. N., & Ngeth, R. (2024). Continuously uploading data to Google Sheet using linear network coding. Life Mechatronics Symposium (LMS2024).

36. Phoeurn, C. A., Degré, A., Oeurng, C., & Ket, P. (2024). Assessing the effects of climate change on the yield and water use efficiency of various dry-season rice varieties grown under traditional and alternate wetting and drying (AWD) methods. *Life Mechatronics Symposium (LMS2024)*.
37. Ngin, K., Valy, D., & Phauk, S. (2024). Online identification of individuals from Khmer handwriting using a deep learning approach. *ACET2024*.
38. Ngin, K. (2024). A deep learning approach for identifying individuals based on their handwriting. *The 13th Scientific Day*.
39. Heng, H. (2024). Utilizing online Khmer handwritten text recognition for educational assistance. *The 13th Scientific Day*.
40. Chan, B. (2024). CNN-based reinforcement learning with policy gradient for Khmer chess. *The 13th Scientific Day*.
41. Ly, K. (2024). Exploring deep learning techniques for Khmer language: Fine-tuning models for chatbot tasks. *The 13th Scientific Day*.
42. Sakal, K. Y. (2024). Khmer large language model. *The 13th Scientific Day*.
43. Phannet, P. (2024). Bus arrival time prediction using machine learning approaches. *The 13th Scientific Day*.
44. Lyheng, S. (2024). A comparative study between machine learning and deep learning approaches for predicting student dropouts. *The 13th Scientific Day*.
45. Chhunheng, S. (2024). Utilizing data mining and AI to enhance Cambodian high school student performance and stakeholder success. *The 13th Scientific Day*.
46. Hengly, E. (2024). Enhancing word spotting accuracy for Khmer printed documents. *The 13th Scientific Day*.
47. Chun, D. (2024). Design of inverted planar F-shape antenna with dual-band frequency for WiFi application. *The 13th Scientific Day*.
48. Hakeng, H. (2024). State machine development of a takeoff and landing process of a hybrid unmanned aerial vehicle. *The 13th Scientific Day*.
49. Hang, H. (2024). Temporal graph learning with application to large-scale flight traffic prediction. *The 13th Scientific Day*.
50. Kosal, S. (2024). Examining passenger loyalty in Phnom Penh public bus system: A structural equation modelling approach. *The 13th Scientific Day*.
51. Vannuth, V. (2024). Human detection with WiFi CSI. *The 13th Scientific Day*.
52. Oudom, Y. (2024). Adapting an access control model to enhance security for distributed ledger access. *The 13th Scientific Day*.
53. Selasak, S. (2024). Security management of reputation records in the self-sovereign identity network for the trust enhancement. *The 13th Scientific Day*.
54. Monyvann, C. (2024). Enhanced robot navigation through reinforcement learning with Khmer direction recognition. *The 13th Scientific Day*.
55. Pechmunivann, S. (2024). Fine-tuning pretrained models using Siamese networks on a Cambodian face dataset. *The 13th Scientific Day*.
56. Roatny, N. (2024). Predictive analysis of stock closing prices: A comparative study of SVM, XGBoost, and LSTM. *The 13th Scientific Day*.
57. Nita, L. (2024). Unlocking agricultural potential with machine learning approach: A soil-centric approach to crop selection in Cambodia. *The 13th Scientific Day*.
58. Chandeth, H. (2024). Rubber prices forecasting: Comparative study of ARIMA, 1D CNN, ensemble, and hybrid model. *The 13th Scientific Day*.
59. Heng, S. (2024). Comparative study of clustering analysis: On KIVA-enhancing microfinance impact through cluster-driven loan strategies in Cambodia. *The 13th Scientific Day*.
60. Seng, V. (2024). Testing quadcopter with adaptive controller based on estimated random parameters for quadcopter trajectory tracking control. *The 13th Scientific Day*.

61. Bun, R. (2024). Automatic recognition of Cambodian license plates. The 13th Scientific Day.
62. Hoem, R. (2024). Flight simulation and control of a fixed-wing UAV using LQR controller. The 13th Scientific Day.
63. Phon, L. (2024). Machine learning-based battery state-of-health estimation for railway applications. The 13th Scientific Day.
64. Him, V. (2024). Designing a self-stabilized thrust vector control system for small-scale rockets. The 13th Scientific Day.
65. Tang, S. B. (2024). Smart motor driver for DC motor. The 13th Scientific Day.
66. Chek, N., Harispe, S., Pec, R., & Sreng, S. (2023). Tuning hyperparameters on Gym environment inverted pendulum. LMSDec2023.
67. Ham, H., & Valy, D. (2023). Online Khmer handwritten text recognition for teaching and learning assistance. LMSDec2023.
68. Em, H., & Valy, D. (2023). Word spotting on Khmer printed document. LMSDec2023.
69. Ly, K., & Valy, D. (2023). Khmer chatbot using deep learning technique. LMSDec2023.
70. Longkim, H., Mok, L., Neang, S., Chou, P., Pov, P., Keo, P., Keo, C., & Srang, S. (2023). Structural design and aero-dynamics simulation of fixed-wing UAV. LMSDec2023.
71. Pich, M., Prim, R., Keo, C., & Srang, S. (2023). Design and fabricate low-cost 4-axis CNC foam cutting. LMSDec2023.
72. Chan, B., & Valy, D. (2023). Khmer chess using reinforcement learning. LMSDec2023.
73. Hort, S., Him, V., & Srang, S. (2023). Detection of apogee with Kalman filter for flight avionics of solid rocket. LMSDec2023.
74. Hor, H., Hoem, R., Keo, C., & Srang, S. (2023). Case study on low-cost adaptive light intensity sensor for solar tracker by using light dependent resistor. LMSDec2023.
75. Ouk, L., Pec, R., & Chhorn, S. (2023). Development of cell identification technique for 5G new radio terrestrial cellular system. LMSDec2023.
76. Ham, H., & Valy, D. (2023). Online Khmer handwritten text recognition dataset. ACET 2023.
77. Huon, S., & Valy, D. (2023). Khmer text semantic similarity: Developing a deep learning model for sentence vectorization and comparison. ACET 2023.
78. Nom, V., Valy, D., & Phauk, S. (2023). Word spotting on Khmer palm leaf manuscript documents. The 12th Scientific Day of ITC.
79. Pork, C., Valy, D., & Phauk, S. (2023). Text-image reconstruction and reparation for Khmer historical documents. The 12th Scientific Day of ITC.
80. Huon, S., & Valy, D. (2023). Plagiarism detection system for Khmer language. The 12th Scientific Day of ITC.
81. Visal, K., Valy, D., Vanda, Y., Hongsin, A., Monit, K., Ham, H., Soknara, Y., Kimheng, P., Chhordaphea, S., Kakada, C., Sopheak, S., & Sonimith, H. (2023). Air handwriting recognition for Khmer characters. The 12th Scientific Day of ITC.
82. Sek, S., & Valy, D. (2023). Masked language modeling for Khmer palm leaf manuscript. The 12th Scientific Day of ITC.
83. Oeng, M. T., Thu, Y. K., Soeum, Z., & Sam, S. (2023). Two SignWriting keyboard layouts for Cambodian fingerspelling. The 12th Scientific Day of ITC.
84. Khun, D., Tith, D., Colin, J. N., & Valy, D. (2023). Reputation model for trust-based policy in self-sovereign identity systems. The 12th Scientific Day of ITC.
85. Chhoem, S., Tith, D., Colin, J. N., & Valy, D. (2023). The trust model in self-sovereign identity systems. The 12th Scientific Day of ITC.
86. Liv, B., Tith, D., Colin, J. N., & Valy, D. (2023). Security enhancement of digital wallet in self-sovereign identity of healthcare system. The 12th Scientific Day of ITC.
87. Korn, V., Sok, K., & Heng, R. (2023). Enhancing the accuracy and reliability of docker image vulnerability scanning technology. The 12th Scientific Day of ITC.

88. Heng, N., Sok, K., & Heng, R. (2023). Case study of organization-task-based access control (OTBAC). The 12th Scientific Day of ITC.
89. Srey, S., & Srang, S. (2023). Comparison of control performance for a low-cost DC motor with single-loop and cascade control architecture. The 12th Scientific Day of ITC.
90. Moeurn, D., & Srang, S. (2023). Performance comparison of ball image detection using deep learning models, UNet, Unet Crop, and FCNN. The 12th Scientific Day of ITC.
91. Seng, R., & Srang, S. (2023). Development of control framework based on ROS platform for a 3-axis gimbal. The 12th Scientific Day of ITC.
92. Virak, A., Virak, S., & Srang, S. (2023). Hardware development of 6 degree-of-freedom robot manipulator. The 12th Scientific Day of ITC.
93. Hort, S., Him, V., & Srang, S. (2023). Investigation of rocket motor performance with syrup-mixture propellant. The 12th Scientific Day of ITC.
94. Nuon, P., & Thourn, K. (2023). Development of a low-cost air leak testing system to analyze pipes quality based on Raspberry Pi and OpenPLC. The 12th Scientific Day of ITC.
95. Un, S. O., Po, K., Thourn, K., & Pec, R. (2023). Communication back-up for natural disaster by emergency amateur radio operator implemented using APRS as location tracker in Cambodia. The 12th Scientific Day of ITC.
96. Sai, T., Tep, S., Hel, C., & Pec, R. (2023). Development of smart greenhouse controller using IoT. The 12th Scientific Day of ITC.
97. Sok, S., Thourn, K., & Po, K. (2023). Development model of non-intrusive appliance load monitoring for household energy improvement basing on VI trajectory. The 12th Scientific Day of ITC.
98. Chun, D., & Thourn, K. (2023). Design of an electromagnetic wave absorber using time-domain techniques. The 12th Scientific Day of ITC.
99. Khe, P., Em, T., Keng, M., Chhorn, S., Kot, T., & Ngeth, R. (2023). Indoor location tracking using UWB. The 12th Scientific Day of ITC.
100. Ouk, L., Pec, R., & Chhorn, S. (2023). Design efficient cell identification technique for 5G terrestrial cellular system. The 12th Scientific Day of ITC.
101. Din, S., & Phauk, S. (2023). Anomaly detection of time series data based on deep learning for feature learning. The 12th Scientific Day of ITC.
102. Eng, K., Phauk, S., Has, S., & Din, S. (2023). The study of Cambodia's commodity price flow trade: The cereal price prediction for anticipated price fluctuation by using the ARIMA model. The 12th Scientific Day of ITC.
103. Leng, S. H., Phauk, S., & Has, S. (2023). An empirical investigation of gold price prediction using LSTM model. The 12th Scientific Day of ITC.
104. Oeun, S., Meng, S., Nhim, C. S., Hel, C., Chhorn, S., Tep, S., & Ket, P. (2023). Development of lab-scale composter for mushroom substrate residual. LMS 2023.
105. Sophanarith, B., Bunthern, K., & Vai, V. (2023). Optimal placement of electric vehicle charging stations using mixed-integer linear programming: A case study in Cambodia. LMS 2023.
106. Chhorn, S., Tep, S., Hel, C., & Pec, R. (2022). Development of ESP32-based smart greenhouse controller. IEEE IoT World Forum.
107. Oum, S., Srang, S., & Yonrith, P. (2022). Integration of RRT* path planning with trajectory tracking for wheeled mobile robot. 2022 Annual Conference on Electronics, Information and Systems, Japan.
108. Huon, S., & Valy, D. (2022). Handwritten Khmer digit recognition using artificial neural network. The 11th Scientific Day of ITC, Cambodia.
109. Born, S., Valy, D., & Kong, P. (2022). Encoder-decoder language model for Khmer handwritten text recognition on historical documents (Sleuk-Rith). The 11th Scientific Day of ITC, Cambodia.
110. Chheang, V. R., Tith, D., & Valy, D. (2022). Distributed authentication infrastructure using public key infrastructure and blockchain. The 11th Scientific Day of ITC, Cambodia.

111. Oum, S., Srang, S., & Yonrith, P. (2022). Integration of RRT* path planning with trajectory tracking for wheeled mobile robot. The 11th Scientific Day of ITC, Cambodia.
112. Gnhiiek, P., Srang, S., & Yonrith, P. (2022). PI controller for velocity controller design based on lumped parameter estimation of a low-cost PMDC motor. The 11th Scientific Day of ITC, Cambodia.
113. Samrit, C., Srang, S., & Yonrith, P. (2022). Design structure for plug and play wheel mobile robot. The 11th Scientific Day of ITC, Cambodia.
114. Yi, V., Srang, S., & Keo, C. (2022). Roll and pitch angle estimation by using unscented Kalman filter. The 11th Scientific Day of ITC, Cambodia.
115. Seng, R., Srang, S., & Keo, C. (2022). Flight transition state machine design for vertical takeoff landing for fixed-wing unmanned aerial vehicle. The 11th Scientific Day of ITC, Cambodia.
116. Oeun, S., Meng, S., Nhim, C. S., Chhorn, S., Tep, S., Hel, C., & Ket, P. (2022). The prototype of smart compost bin (S-Mush Bin). The 11th Scientific Day of ITC, Cambodia.
117. Ros, S., & Valy, D. (2022). Face mask recognition using ResNet and DenseNet. The 11th Scientific Day of ITC, Cambodia.
118. Sea, H., Valy, D., & Kong, P. (2022). Insects and abnormalities detection using convolutional neural network. The 11th Scientific Day of ITC, Cambodia.
119. Than, S., Valy, D., & Kong, P. (2022). Crop disease data & detection using convolutional neural network. The 11th Scientific Day of ITC, Cambodia.
120. Ny, S., Valy, D., & Kong, P. (2022). Lock and unlock door with face detection using OpenCV, Python, and Arduino board. The 11th Scientific Day of ITC, Cambodia.
121. Un, L., & Valy, D. (2022). Isolated Khmer character recognition. The 11th Scientific Day of ITC, Cambodia.
122. Koun, R., Ly, P., Vong, T., Bun, S., Tim, H., & Keo, C. (2022). Concept study of dual axes camera tracker and rocket detection by using color-based detection. The 11th Scientific Day of ITC, Cambodia.
123. Chhorn, S., Tep, S., Hel, C., & Pec, R. (2022). Development of ESP32-based smart greenhouse controller. IEEE IoT World Forum.
124. Oum, S., Srang, S., & Yonrith, P. (2022). Integration of RRT* path planning with trajectory tracking for wheeled mobile robot. 2022 Annual Conference on Electronics, Information and Systems, Japan.
125. Huon, S., & Valy, D. (2022). Handwritten Khmer digit recognition using artificial neural network. The 11th Scientific Day of ITC, Cambodia.
126. Born, S., Valy, D., & Kong, P. (2022). Encoder-decoder language model for Khmer handwritten text recognition on historical documents (Sleuk-Rith). The 11th Scientific Day of ITC, Cambodia.
127. Chheang, V. R., Tith, D., & Valy, D. (2022). Distributed authentication infrastructure using public key infrastructure and blockchain. The 11th Scientific Day of ITC, Cambodia.
128. Oum, S., Srang, S., & Yonrith, P. (2022). Integration of RRT* path planning with trajectory tracking for wheeled mobile robot. The 11th Scientific Day of ITC, Cambodia.
129. Gnhiiek, P., Srang, S., & Yonrith, P. (2022). PI controller for velocity controller design based on lumped parameter estimation of a low-cost PMDC motor. The 11th Scientific Day of ITC, Cambodia.
130. Samrit, C., Srang, S., & Yonrith, P. (2022). Design structure for plug and play wheel mobile robot. The 11th Scientific Day of ITC, Cambodia.
131. Yi, V., Srang, S., & Keo, C. (2022). Roll and pitch angle estimation by using unscented Kalman filter. The 11th Scientific Day of ITC, Cambodia.
132. Seng, R., Srang, S., & Keo, C. (2022). Flight transition state machine design for vertical takeoff landing for fixed-wing unmanned aerial vehicle. The 11th Scientific Day of ITC, Cambodia.
133. Oeun, S., Meng, S., Nhim, C. S., Chhorn, S., Tep, S., Hel, C., & Ket, P. (2022). The prototype of smart compost bin (S-Mush Bin). The 11th Scientific Day of ITC, Cambodia.
134. Ros, S., & Valy, D. (2022). Face mask recognition using ResNet and DenseNet. The 11th Scientific Day of ITC, Cambodia.

135. Sea, H., Valy, D., & Kong, P. (2022). Insects and abnormalities detection using convolutional neural network. The 11th Scientific Day of ITC, Cambodia.
136. Chin, C. D., Hel, C., & Pec, R. (2021). Initiation of the creation of Fab Lab for advanced studies: Digital solutions focusing on traditional agriculture in the context of Cambodia. 2021 3rd National Research Forum.

Annex 44. List of publication for the last 5 years from MSS Research Unit.

List of Index publications from 2020

1. Taing, K.; Reiter, S.; Han, V.; Leclercq, P. (2025). Bioclimatic Design Guidelines for Design Decision Support to Enhance Residential Building Thermal Performance in Tropical Regions, Sustainability. <https://doi.org/10.3390/su17041591>
2. Long, M., Han, V., Leclercq, P., & Reiter, S. (2024). Integration of Affordable Housing and Green Residential Building Design in the Construction Sector in Cambodia. In WIT Transactions on Ecology and the Environment. Volume 262 (pp. 215-227). doi:10.2495/sdp240181
3. Pisey Keo, Thaileng Oeng, Mohammed Hjiatj. (2024) Mixed-formulation with non-penetration constraint for planar composite beams in partial interaction. Journal of Computational Mechanics. <https://doi.org/10.1007/s00466-024-02476-2> (IF = 4.1)
4. Sreng, L., Yos, P., Seang, S. and A.A, Rashid (2024) Effect of pottery clay on mechanical and impact absorption properties of natural rubber floor mat. J Rubber Res. <https://doi.org/10.1007/s42464-024-00264-4>
5. Chea, L., Doung, P., Leelataviwat, S. (2023) Relation Between Input Energy and Equivalent Monotonic Response Curve, IWEBSE 2023, Lecture Notes in Civil Engineering, vol. 236. Springer Nature. https://doi.org/10.1007/978-3-031-36562-1_7
6. Lin, C., Chhin, R., Han, V., Doung, P. (2023) Determination of Basic Wind Speed for the Design of Buildings in Cambodia, IOP Conference Series: Earth and Environmental Science, Vol. 1205 (1), 012044. <https://doi.org/10.1088/1755-1315/1205/1/012044>
7. Taing, K., Andre, P., & Leclercq, P. (2023). Analysis of Thermal Performance of Naturally Ventilated Residential Building in Tropical Climate: Case Study of Phnom Penh, Cambodia. IOP Conference Series: Earth and Environmental Science, 1199(1), 012038. <https://doi.org/10.1088/1755-1315/1199/1/012038>
8. Keth, K., Ben Rajeb, S., & Han, V. (2023). Identification of Workflow in Construction Projects in Cambodia: With and Without Building Information Modeling/ Models/Management Approaches. International journal on advances in intelligent systems, 16(1942-2679), 3-4, 74-88.
9. Kan, K., & François, B. (2023). Triaxial tension and compression tests on saturated lime-treated plastic clay upon consolidated undrained conditions. Journal of Rock Mechanics and Geotechnical Engineering. <https://doi.org/10.1016/j.jrmge.2023.03.017> (IF = 5.915)
10. Mao, P., Hashikawa, H., Sasaoka, T., Shimada, H., Wan, Z., Hamanaka, A., Oya, J. (2022) Numerical Investigation of Roof Stability in Longwall Face Developed in Shallow Depth under Weak Geological Conditions. Journal of Sustainability. 14(3). <https://doi.org/10.3390/su14031036> (IF = 3.889)
11. Bun, P., Cyr, M., Laniessse, P., Bun, K. N., Idir, R. (2022) Concrete made of 100% recycled materials - Feasibility study. 180 (2022). 106199. <https://doi.org/10.1016/j.resconrec.2022.106199> (IF = 13.716)
12. Mom, A., Hoeun, S., Bernard, F., Kamali-Bernard, S., Han, V. (2022) The Effect of Thermal Contact Conductance (TCC) between Aggregate Inclusion and Matrix on Thermal Conductivity of Cement-based Material. International Journal of Integrated Engineering. 14(5). pp. 99-106.
13. Chea, C., Ket, P., Taing, L., Kong, S., Um, D., Taing, C., Or, C., Aun, S. and Hang, L. (2022) Life-Cycle Impact Assessment of Air Emissions from a Cement Production Plant in Cambodia. *Open Journal of Air Pollution*, 11, 85-99. doi: 10.4236/ojap.2022.114007. (IF = 0.79)
14. Lorn, S., Ket, P., Or, C., Kong, S., Um, D., Aun, S., Taing, C., Hang, L. (2022) Health Impact Assessment from Rice Straw Production in Cambodia. *Appl. Sci*, 12, 10276. <https://doi.org/10.3390/app122010276> (IF = 2.838)
15. Leelataviwat, S., Doung, P., Naiyana, N. (2021) A review on performance-based plastic design method: concept and recent developments. 155. https://doi.org/10.1007/978-3-030-73932-4_8 (Book chapter)
16. Piseth, D., Sutath, L., Eiichi, S. (2021) Tensile strength and failure mechanism of internal diaphragms in wide flange beam-to-box column connections with concrete filling. Elsevier, <https://doi.org/10.1016/j.jobbe.2020.102037> (IF: 5.138)

17. Sophea, B., Yoshaiki, F., Jun-ichi, K., Daisuke, F., Anjula, D., A.K.M. Badrul A. (2020) Laboratory Investigation on the Permeability Variation of Fractured Inada Granite by Multiple Transient Axial Stress Disturbances. *Pure and Applied Geophysics*. 177(11). 5385-5396 (2020). DOI: 10.1007/s00024-020-02565-2
18. Amirthan, T., Lahiru, D., Tharaka, D., Anjula, D., Chulantha, J., Maheshwari, W., Yoshiaki, F., Sophea, B. (2020) Stability Analysis of Slopes in Aruwakkalu Limestone Mine During Rain: A Finite Element Approach. *IEEE*. DOI: 10.1109/MERCon50084.2020.9185268
19. Takashi, S., Pisith, M., Hideki, S., Akihiro, H., and Jiro, O. (2020) Numerical Analysis of Longwall Gate-Entry Stability under Weak Geological Condition: A Case Study of an Indonesian Coal Mine. *Energies* 13, no. 18: 4710

List of Non-index publications from 2020

1. R. Thai, P. Doung. (2024). An Investigation of External Pressure Coefficient for Low-Rise Building: A Comparison between CFD and ASCE7-22 Models for Cambodia Wind, *Techno-Science Research Journal* 12 (Special Issue), <https://techno-srj.itc.edu.kh/>
2. Manuth Ny, Muoy Yi Heng, Phanny Yos, Tithya Keo, Than Heng, Vitharong Chan. (2024). Characterization of Plaster from Sambor Prei Kuk Temples, Kompong Thom, Cambodia, *Techno-Science Research Journal* 12 (Special Issue), <https://techno-srj.itc.edu.kh/>
3. David Tung, Keangse Pouy, Sambath Ky. (2024). Numerical Analysis of Bearing Capacity of Defected Bored Piles, *Techno-Science Research Journal* 12 (Special Issue), <https://techno-srj.itc.edu.kh/>
4. Mengsean Heng, Muoy Yi Heng, Phanny Yos, Tithya Keo, Than Heng, Vitharong Chan. (2024). Laterization Origin of Heritage Rampart of Sambor Prei Kuk Area, Kompong Thom Province, Cambodia, *Techno-Science Research Journal* 12 (Special Issue), <https://techno-srj.itc.edu.kh/>
5. Lymeng Ty, Narith Prok, Sovann Sathya Rath, Sovanvichet Lim, Wee Keong Ong. (2024). Experimental and Numerical Study of Tyfo® FibrAnchors Inserting to Concrete Cylinder Confined by Glass Fiber Reinforcing Polymer, *Techno-Science Research Journal* 12 (Special Issue), <https://techno-srj.itc.edu.kh/>
6. Mengla An, Narith Prok, Sovann Sathya Rath, Sovanvichet Lim, Wee Keong Ong. (2024). Experimental and Numerical Study of Tyfo® FibrAnchors Embedded in Low Compressive Strength Concrete Cylinder, *Techno-Science Research Journal* 12 (Special Issue), <https://techno-srj.itc.edu.kh/>
7. Ya Phall, Mouy Yi Heng, Phanny Yos, Than Heng, Vitharong Chan. (2024), Mineral and Chemical Characteristics of Ancient brick of Sambor Prei Kuk Temple, Kompong Thom, Cambodia, *Techno-Science Research Journal* 12 (Special Issue), <https://techno-srj.itc.edu.kh/>
8. Chann, S., Hin, R., Sangleboeuf, J.-C., (2024) Experimental study on the improvement of bolted connection of glass structure by using ion-exchange. *Techno Science Research Journal*. 12 (1)
9. Doung, P., Lin, C., Vong, S., Sion, R., Chhin, R., Han, V. (2023) Basic Wind Speed Prediction for the Design of Building in Siem Reap, *Cambodian Journal of STEM and Education Research*, 1(1). (in Khmer)
10. Seang, S., Kan, K., & Okamoto, M. (2022). Feasibility Study of Using Recycled Waste Plastic in Bituminous Concrete Application. *Techno Science Research Journal*. 10(2).
11. Oeung, K., Doung, P., Leelataviwat, S., Han, V. (2022) Analytical Assessment of Earthquake Energy Demand in Single Degree of Freedom Systems, *Techno Science Research Journal*. 10(1).
12. Doung, P., Leelataviwat, S. (2022) Direct Seismic Design Methods for Buckling-Retrained Knee-Braced Frames with Single Plate Shear Connections. *Techno Science Research Journal*. 10(1).
13. Sreng, L., Azura, A. R., Yos, P. (2021) Effects of Cambodian Clay on the Physical and Mechanical Properties of Natural Rubber Latex Foams. *Techno Science Research Journal*, In Press
14. Chea, L., Prok, N., Rath, S.S. (2020) Effect on Capacity of RC Beam and Column Strengthened with Fibrwrap® System by Cyclic Exposure to Water and Salt Water *Techno Science Research Journal*, Vol. 9.

15. Chab, H., Rath, S.S., Prok, N. (2020). "Mechanical Properties of Reinforced Concrete Beam and Column Strengthened by Fibrwrap® System after being Submerged to Different Exposure Solutions". *Techno Science Research Journal*, Vol. 9.

List of Conferences from 2020

1. Likea Heng, Soma Tey Nuon, Seka Kong, Laymey Sreng, Phanny Yos. (2025). Investigation on Mechanical Properties and Antimicrobial Activity of Natural Rubber Latex Examination Gloves Incorporated with Pomelo Peel Powder, 14th Scientific Day of ITC, 5-6 June 2025, Phnom Penh.
2. Kakda Yiem, Yukleav Nat, Laymey Sreng, Phanny Yos. (2025). Utilization of Fly Ash as an Eco-friendly filler in Styrene Butadiene Rubber compound for tire tread application, 14th Scientific Day of ITC, 5-6 June 2025, Phnom Penh.
3. Kong Sreynich, Nat Yukleav, Phanny Yos, Laymey Sreng. (2025). Investigation of Natural Oils as Processing Aids and Activators Alternative to Naphthenic Oils in Rubber Composites, 14th Scientific Day of ITC, 5-6 June 2025, Phnom Penh.
4. Mengly IEM, Yana Chhoeun, Bunchoeun Pich, Sirisokha Seang, Kimhouy Oy. (2025). Lithology, Geochemistry, Hydrothermal Alteration and Mineralization of Cu-Mo porphyry deposits at Canada Wall prospect, Andong Meas District, Ratanakiri Province, Cambodia. 14th Scientific Day of ITC, 5-6 June 2025, Phnom Penh.
5. Chanbo Buoy, Kuchvichea Kan, Bertrand François. (2025). Resilient modulus of lime-treated materials for pavement design in the Cambodian context, 14th Scientific Day of ITC, 5-6 June 2025, Phnom Penh.
6. Sambath KEO, Vengkheang PHUN, Yat YEN. (2025). Deploying ANPR Technology to Detect Traffic Violation at Intersections in Phnom Penh, 14th Scientific Day of ITC, 5-6 June 2025, Phnom Penh.
7. Phearun MAO, Veng Kheang PHUN, Narith SAUM. (2025). Low-Cost Road Surveying: 3D Road Surface Reconstruction From 2D LiDAR Sensor and GPS, 14th Scientific Day of ITC, 5-6 June 2025, Phnom Penh.
8. Lihong PHINY, Veng Kheang PHUN, Narith SAUM, Sokhit PLACK. (2025). Assessing Motorcycle Emissions and Their Impact on Urban Air Quality: A Case Study at ITC, Phnom Penh, 14th Scientific Day of ITC, 5-6 June 2025, Phnom Penh.
9. Bopheaktra PHO, Narith SAUM, Tetsya SOK, Lyhour CHHAY. (2025). Correlation Between Dynamic Cone Penetrometer (DCP) and California Bearing Ratio(CBR) for Subgrade Soil Materials in Cambodia, 14th Scientific Day of ITC, 5-6 June 2025, Phnom Penh.
10. Piseth SRORN, Veng Kheang PHUN, Narith SAUM. (2025). Machine Learning-Based Prediction of Public Bus Ridership: A Case Study in Phnom Penh City, 14th Scientific Day of ITC, 5-6 June 2025, Phnom Penh.
11. Chy TENG, Kuchvichea KAN, Phanny YOS. (2025). Evaluation of Modified Asphalt Binders Incorporating Recycled Plastic Waste for Enhanced Pavement Performance, 14th Scientific Day of ITC, 5-6 June 2025, Phnom Penh.
12. Vanntheng Yoeunthy, Kuchvichea Kan, Bertrand François, Kean Thai Chhun. (2025). IMPROVING THE DURABILITY AND STRENGTH OF EXPANSIVE SOILS STABILIZED WITH EMULSION ASPHALT AND CEMENT, 14th Scientific Day of ITC, 5-6 June 2025, Phnom Penh.
13. Rayuth Keat, Raveth Hin, Chansopheak Seang. (2025). Design and modelling of cost-effective manufacturing of glass tempering furnace used in industrial applications, 14th Scientific Day of ITC, 5-6 June 2025, Phnom Penh.
14. Taing, K., Reiter, S., Leclercq, P., & Han, V. (2024). Integration of BIM and BES in sustainable architecture design process: case study of a developing country, PLEA 2024 Conference, 25-28 June 2024, Wrocław, Poland. <https://hdl.handle.net/2268/324356>
15. Taing, . (2024). Processus de conception d'un bâtiment bioclimatique dans environnement pédagogique, Conference SCAN'24, 06-09 November 2024, Tunis, Tunisia. <https://hdl.handle.net/2268/324354>
16. Taing, K., Jeunejean, A., Han, V. (2024) VIRELI : Visualisation de processus de design

- à travers les ressources, les moyens de conception et les livrables, ModACT 2024 Conference, Paris, France
17. Sreyya YIV, Srean AUN, Yukleav NAT, Chanbormey MIEN, Siekheng RAKSMEY, Sreynith KOU, Sovannleakhena HAK, Bunhav HUN. (2024) Development of Native Cassava Starch/Poly(lactic acid) for film sheet fabrication, The ITC's 13th Scientific Day, 6-7 June 2024
 18. Siekheng RAKSMEY, Srean AUN, Yukleav NAT, Bunhav HUN, Sreyya YIV, Chanbormey MIEN, Sovannleakhena HAK, Sreynit KOU. (2024) Cassava Starch Extraction for Film Fabrication, The ITC's 13th Scientific Day, 6-7 June 2024
 19. Raksa Ren, Worraddon Phairuang, Mitsuhiko Hata, Masami Furuuchi, Muhammed Amin, Chhaytong Meng, Chanmoly Or, Koemlang Theng, Srean Aun. (2024) Preliminary study of the diurnal and nocturnal size-segregated particulate mass concentration in atmospheric air quality, The ITC's 13th Scientific Day, 6-7 June 2024
 20. Chhaytong MENG, Srean AUN, Worraddon Phairuang, Mitsuhiko Hata, Masami Furuuchi, Muhammed Amin, Raksa REN, Chanmoly OR, Koemlang THENG. (2024) Difference of Particulate Matter in Ambient Environment during Daytime and Nighttime in Phnom Penh City, The ITC's 13th Scientific Day, 6-7 June 2024
 21. Chanseyha But, Kuchvichea Kan, Bertrand François. (2024) Various Pavement Management Systems (PMS), already applied or to be applied, for road management in Cambodia, The ITC's 13th Scientific Day, Phnom Penh, 6-7 June 2024
 22. But, C., **Doung, P.** (2023) Updating Basic Wind Speed for Wind Load Design in Sihanoukville, International Conference on Earth Resources and Geo-Environmental Technology 2023, 23-25 September 2023, Phnom Penh, Cambodia
 23. Thai, R., **Doung, P.** (2023) An Investigation of External Pressure Coefficient for Low-Rise Building: A Comparison between CFD and ASCE7-22 Models for Cambodia Wind, International Conference on Earth Resources and Geo-Environmental Technology 2023, 23-25 September 2023, Phnom Penh, Cambodia
 24. Vong, S., Chin, R., **Doung, P.** (2023) Evaluation of Gust Loading Effects on Tall RC Building in Cambodia: A Comparison between International Load Standards. Extended Abstract of The ITC's 12th Scientific day, 8-9 June 2023, Cambodia
 25. Thai, R., Chhin, R., Han, V., **Doung, P.** (2023) A comparative evaluation of directionality factor between international load codes for low-rise steel building and their conformity to Cambodia wind. Extended Abstract of The ITC's 12th Scientific day, 8-9 June 2023, Cambodia
 26. Sovann, D., Heng, S., **Doung, P.** (2023) Evaluation of strength and failure of post-installed bundled rebar in concrete using finite element analysis. Extended Abstract of The ITC's 12th Scientific day, 8-9 June 2023, Cambodia
 27. Mengla A., Narith P., Sovann Sathya R., Sovanvichet L., Wee Keong O. (2023) Experimental and Numerical Study of Tyfo(R)FibrAnchors Embedded in Low Compressive Strength Concrete Cylinder. The 14th AUN/SEED-NET Regional Conference on Geological and Geo-Resources Engineering, Phnom Penh, Cambodia.
 28. Lymeng T., Narith P., Sovann Sathya R., Sovanvichet L., Wee Keong O. (2023) Experimental and Numerical Study of Tyfo(R)FibrAnchors Inserting to Concrete Cylinder Confined by Glass Fiber Reinforcing Polymer. The 14th AUN/SEED-NET Regional Conference on Geological and Geo-Resources Engineering, Phnom Penh, Cambodia.
 29. S. Chann, R. Hin, J. C. Sangleboeuf, 2023, Experimental study on the improvement of bolted connection of glass structure by using ion-exchange. The 2nd International Conference on Earth Resources and Geo-Environment Technology 2023 (EraGET2023), Phnom Penh, Cambodia
 30. Ngoun, P., **Srean, A.**, Muhammad A., Hang, L., Hata, M., Taing, C., Kong, S., Or, C., Um, D., Furuuchi, M. (2023). "Monitoring Particulate Matters and Total Suspended Particles Along the Roadside and Public Area in Phnom Penh" *2nd ASEAN International Conference on Energy and Environment*. [doi:10.1088/1755-1315/1199/1/012020](https://doi.org/10.1088/1755-1315/1199/1/012020)

31. Chy, S., **Srean, A.**, Hang, L., Hata, M., Mitsuhiro, H., Or, C., Kong, S., Taing, C., Um, D., Furuuchi, M. (2023) "Determination of Particulate Matters and Total Suspended Particles emitted from Incense Burning" *2nd ASEAN International Conference on Energy and Environment*. [doi:10.1088/1755-1315/1199/1/012019](https://doi.org/10.1088/1755-1315/1199/1/012019)
32. Phairuang, W., Hata, M., Takao, M., Taing, C., Ho, S., **Aun, S.**, ... & Furuuchi, M. (2023, July). Ten Years Behavior of Carbonaceous Ultrafine Particulate Matter (PM_{0.1}) in Phnom Penh, Cambodia. In *IOP Conference Series: Earth and Environmental Science* (Vol. 1199, No. 1, p. 012024). IOP Publishing
33. Taing, K., Leclercq, P., Han, V. (2023) Visualisation d'une design timeline et des outils mobilisés en conception architecturale bioclimatique, ModACT Conference, Paris, France
34. Taing, K., Han, V., Leclercq, P. (2023) BIM Model and BES Model Approach in Designing a Bioclimatic Building, The 12th Scientific Day 8-9 June 2023, Phnom Penh, Cambodia
35. Keth, K., Han, V., Rajeb, B-S. (2023) Guideline/Protocols for Collaborative Design and Build Process in Cambodia, ITC's 12th Scientific day, 8-9 June 2023, Cambodia
36. Long, M., Han, V., Leclercq, P., Reiter, S. (2023) Sustainable Building Design Strategy from Life Cycle Thinking Perspective Case Study: A Townhouse in Phnom Penh, Cambodia, ITC's 12th Scientific day, 8-9 June 2023, Cambodia
37. Raksa, S., S, Aun., Worrador, P., Mitsuhiro, H., Leakhena, H., Muhammad, A., Chanmoly, O., Masami, F. (2023) Seasonal Variation of Carbon Composition in Total Suspended Particles in Phnom Penh, Cambodia. Extended Abstract of The ITC's 12th Scientific day, 8-9 June 2023.
38. Muhammad, A., S, Aun., Leakhena, H., Chanmoly, O., Mitsuhiro, H., Masami, F. (2023) Preliminary assessment of personal exposure to ultrafine particle (UFP) in Phnom Penh, Cambodia. Extended Abstract of The ITC's 12th Scientific day, 8-9 June 2023.
39. E, Torabi., S, Aun., M, Hata., M, Amin., Leakhena, H., M, Furuuchi. (2023) Development of a Small Nano-Particle Sensor Using Light Scattering and its Application to On-line Ambient Monitoring. Extended Abstract of The ITC's 12th Scientific day, 8-9 June 2023.
40. Keth, K., Ben Rajeb, S., Han, V. (2023) Collaborative Works in Construction Project in Cambodia: Toward a Workflow Scenario Identification. COLLA 2023: The Thirteenth International Conference on Advanced Collaborative Networks, Systems and Applications 13-17 March, 2023 - Barcelona, Spain.
41. Rorn, K., Seang, S., Kret, K., Oy, K. and Ammugauan, J. (2023) Lithology, Alteration Minerals, and Ore Mineralization in Memot, Tbong Khmum Province, Cambodia. Proceedings of the ITC's 12th Scientific Day, 8-9 June 2023
42. Por, V., Seang, S., Kret, K., and Oy, K. (2023) Lithology, Ore mineralization, and Hydrothermal Alteration of Canada Wall Porphyry Cu-Mo-Au at Andongmeas, Ratanakiri, Cambodia. Proceedings of the ITC's 12th Scientific Day, 8-9 June 2023
43. Rothana Kheng, Sirisokha Seang, Kotaro Yonezu, Kimhouy Oy, Kakda Kret, Koichiro Watanabe, Seangleng Hoen, Panhavong Ly, Bunna Hang (2023) Hydrothermal Alteration, Mineralization and Geochemistry of Igneous rocks of Area-5 in Koh Sla, Kampot province, Southwestern Cambodia. Proceedings of the International Symposium on Earth Science and Technology, Japan.
44. Kouleam, S., Prok, N., Rath, S. S. (2022) Experimental Study on Performance of Fiber Anchor Under Axial Tension, NPIC Conference Proceeding. 12th December 2022, Cambodia
45. Chan, R., Prok, N., Rath, S. S. (2022) Experimental Study of the Effectiveness of Anchor Fibers Inserting into Concrete Cylinder Confined by Glass Fiber Reinforcing Polymer, NPIC Conference Proceeding. 12th December 2022, Cambodia
46. Sreng, L., Seang, S., Azura, A.R., Yos, P. (2022) Characterization of Cambodian natural rubber/common clay composites for shock absorption applications: Primary results. *Materials Today: Proceedings*. 66(5). pp. 3112-3115, <https://doi.org/10.1016/j.matpr.2022.08.013>.
47. Taing, K., Leclercq, P. (2022) Adoption contextuelle des pratiques pédagogiques: entre écosystèmes physique et logiciel, le cas de l'architecture bioclimatique en Asie du sud-est. SHS Web of Conferences. 147(2022). <https://doi.org/10.1051/shsconf/202214707002> (open access)

48. Doung, P., Leelataviwat, S., Chea, L., Sorn, C. (2022) Experimental Assessment of Strength and Failure Modes of Post-Installed Bundled Rebar in Concrete. Second International Conference on Construction Materials and Structures (ICCMS-2022). 13-20 December 2022, National Institute of Technology Calicut (NITC), India (online)
49. Ly, P., Seang, S., Kret, K., Oy, K., Yonezu, K., Watanabe, K., Sreu, T. (2022) Lithology, hydrothermal alteration, and ore characteristics of Area-1 in Koh Sla, Chhouk district, Kampot Province, southern Cambodia. Proceedings of the International Symposium on Earth Science and Technology, Japan
50. Chheuy, P., Kret, K., Seang, S., Or, C., Kong, S., Kry, R., Oy, K., Chan, C., Sreu, T., Hoeun, S., Hoeun, S., Chhun, C., Neak, K. (2022) Hydrothermal Alteration Mineral Mapping by Integrating of ASTER and Landsat-8: A case study in Phnom Peam Louk, Kompong Chhang Province, Southwest Cambodia. Proceedings of the International Symposium on Earth Science and Technology, Japan 2022
51. Neak, K., Kret, K., Sreu, T., Or, C., Seang, S. (2022) Hydrothermal Alteration Mineral Mapping by Integrating of ASTER and Landsat-8: A case study in Phnom Peam Louk, Kompong Chhang Province, Southwest Cambodia. Proceedings of the International Symposium on Earth Science and Technology, Japan 2022
52. Boeurn, C., Seang, S., Kret, K., Yonezu, K., Watanabe, Z., Zaw, K. (2022) Geology and Hydrothermal Alteration of Skarn Deposit in Area 4, Phnom So Ngam Tenement, Chhouk District, Kampot Province, Cambodia. Proceedings of the International Symposium on Earth Science and Technology, Japan 2022
53. Kim, C., Kret, K., Seang, S., Kong, K., Or, C., Oy, K., Ammuguan, J., Heoun, S., Chhun, C., and Neak, K. (2022) Lithological Analysis of Koh Nheak, Mondoukiri Province Using Landsat-8 OLI and ASTER. Proceedings of the International Symposium on Earth Science and Technology, Japan 2022
54. Seang, S., Kan K., & Okamoto, M. (2022). Feasibility Study of Using Recycled Waste Plastic in Bituminous Concrete. Proceedings of Conference on Business, Social Sciences and Technology (CoNeScINTech), 2(1), 59-66.
55. Lin, L., Chhin, R., Han, V., Doung, P. (2022) Prediction of Basic Wind Speed for Battambang Province. Conference on Business, Proceedings of Social Sciences and Technology (CoNeScINTech). 2(1), pp. 67-72. ISSN 2808-5485
56. Lin, L., Chhin, R., Han, V., Doung, P. (2022) Determination of Basic Wind Speed for the Design of Buildings in Cambodia. The 4th International Symposium on Civil and Environmental Engineering (ISCEE 2022). Universiti Tun Hussein Onn Malaysia, 3-4 October 2022. (online)
57. Lin, L., Chhin, R., Han, V., Doung, P. (2022) Beginning Step of the Development of Basic Wind Speed for Structural Design in Cambodia. AUN/SEED-NET Joint Graduate Research Seminar in Civil Engineering. Institute of Technology of Cambodia, 21 December 2022
58. Keth, K. (2022) Understanding the Collaborative Works in Construction Projects in Phnom Penh, Cambodia. AUN/SEED-NET Joint Graduate Research Seminar in Civil Engineering. Institute of Technology of Cambodia, 21 December 2022
59. Keth, K., Ben Rajeb, S., Han, V. (2022) Multidisciplinary Collaboration in Construction projects in the Cambodian Context. Séminaire inaugural de l'école doctorale thématique (Architecture, Urbanisme, Ingénierie Architecturale et Urbaine – EDT 62, Brussels, 4 March 2022
60. Long, M., Leclercq, P., Han, V., Reiter, S. (2022) Life Cycle Assessment Approach for the Future Green Affordable Housing in Phnom Penh, Cambodia. AUN/SEED-NET Joint Graduate Research Seminar in Civil Engineering. Institute of Technology of Cambodia, 21 December 2022
61. Long, M., Leclercq, P., Han, V., Reiter, S. (2022) Green Building Design Strategy for a House in Phnom Penh from Life Cycle Assessment. Young Researchers Overseas Day, 12 December 2022
62. Khim, R., Han, V., Doung, P. (2022) Performance-Based Plastic Design and Evaluation of Tall Knee-Braced Frames with Simple Connections. AUN/SEED-NET Joint Graduate Research Seminar in Civil Engineering. Institute of Technology of Cambodia, 21 December 2022

63. Vong, S., Chhin, R., Doung, P. (2022) Basic wind speed analysis and serviceability evaluation of tall reinforced concrete building subjected to wind and earthquake: a case study in Phnom Penh. NPIC Conference Proceeding. 12th December 2022, Cambodia
64. Sorn, C., Heng, S., Doung, P. (2022) Assessment of Bond Behavior of Post-Installed Bundled Reinforcement using Finite Element Method. NPIC Conference Proceeding. 12th December 2022, Cambodia
65. But, R., Heng, S., Doung, P. (2022) Bond Strength Assessment of Post-Installed Single Reinforcement using Finite Element Analysis. NPIC Conference Proceeding. 12th December 2022, Cambodia
66. Taing, K., Andre, P., Leclercq, P. (2022) Analysis of thermal performance of naturally ventilated residential building in tropical climate: case study of Phnom Penh, Cambodia, 2nd ASEAN International Conference on Energy and Environment (AICEE), Phnom Penh, Cambodia
67. Karagianni, C., Schwede, D., Taing, K., Han, V., (2022) Smart technology supporting traditional and bioclimatic building functions in reducing cooling energy demand in Cambodia, Digital Insights
68. Taing, K., (2022) Bio-climatic design as a solution for residential building thermal comfort in tropical climate, 2nd Biennial of Tropical Architecture of Reunion Island, Reunion Island
69. Hun, P., Chung, C., Doung, P. (2022) A Comprehensively Comparative Review of Wind Load Codes for the Conformity to Cambodia Wind. 4th National Research Forum. 20-21 October 2022, Phnom Penh, Cambodia
70. Lim, M., Seang, S., Kret, K., Oy, K., Ammugauan, J. (2022) Ore Mineralization, Hydrothermal Alteration of China Wall Porphyry Cu-Mo-Au at Adongmeas, Ratanakiri, Cambodia. Proceedings of the ITC's 11th Scientific Day, 5-6 May 2022
71. Boeurn, C., Seang, S., Kret, K., Oy, K., Kong, S., Kong, S. (2022) Petrography and Hydrothermal alteration of Skarn prospect in Area 4, Phnom Sro Ngam Tenement, Chhouk District, Kompot province, Cambodia. Proceedings of the ITC's 11th Scientific Day, 5-6 May 2022
72. Ly, P., Seang, S., Kret, K., Oy, K., Kong, S., Ammugauan, J., Kong, S. (2022) Hydrothermal Alteration and Ore Mineralization of Area-1 in Koh Sla, Chhouk district, Kampot Province, Southern Cambodia. Proceedings of the ITC's 11th Scientific Day, 5-6 May 2022
73. Kim, C., Kret, K., Seang, S., Kong, S., Or, C., Kry, R., Oy, R., Ammugauan, R., Keat, L., Neak, K., Chhun, C., Hoeun, S., Hoeun, S., Sreu, T. (2022) Lithological Mapping using Landsat-8 Oli and Aster Multispectral Data in Koh Nheak, Monduliri Province, Northeast Cambodia. Proceedings of the 1st International Conference on Earth Resources and Geo-Environmental Technology 2022
74. Boeurn, C., Seang, S., Oy, K., Kret, K., Kong, S., Ammugauan, J. (2022) Lithology and Skarn Mineralogy in Area 4, Phnom So Ngam Tenement, Chhouk District, Kampot Province, Cambodia. Proceedings of the 1st International Conference on Earth Resources and Geo-Environmental Technology 2022
75. Sreng, L., Seang, S., Rashid, A. A., and Yos, P. (2022) Performance Study of Cambodian Natural Rubber/Clay Composites for Shock Absorption Application: Primary Results. Proceedings of the 1st International Conference on Earth Resources and Geo-Environmental Technology 2022
76. Chheuy, P., Kret, K., Seang, S., Or, C., Kong, S., Kry, R., Keat, L., Chhun, C., Hoeun, S., Sreu, T. (2022) Application of ASTER and Landsat-8 for hydrothermal alteration mineral mapping for prospective mineral deposits exploration in Kompong Chhnang, in Southwest of Cambodia Proceedings of the 1st International Conference on Earth Resources and Geo-Environmental Technology 2022
77. Yuth, Y. O., Kret, K., Seang, S., Or, C., Kong, S., Sokeang, Hoeun, S., Hoeun, S. (2022) Estimation of Land Surface Temperature Using Landsat-8 in Teh Teuk Pus Geothermal Field, Kompong Speu province, Southwest Cambodia. Proceedings of the 1st International Conference on Earth Resources and Geo-Environmental Technology 2022
78. Ly, P., Seang, S., Hlaing, K. M., Oy, K., Kret, K. (2022) Initial investigations on the alteration mineralogy and ore characteristics of Area-1 in Koh Sla, Chhouk district, Kampot province, southern Cambodia. Proceedings of the 1st International Conference on Earth Resources and Geo-Environmental Technology 2022

79. Lin, L., Chhin, R., Han, V., Doung, P. (2022) Prediction of Basic Wind Speed for Design of Building in Sihanoukville. the ITC's 11th Scientific Day, 5-6 May 2022
80. Soung, R., Doung, P. (2022) Numerical Performance Evaluation of Steel Ring Damper Under Uni-axial Cyclic Loading. Proceedings of the ITC's 11th Scientific Day, 5-6 May 2022
81. Sion, R., Chhin, R., Han, V., Doung, P. (2022) Estimating Basic Wind Speed used for Building Design in Phnom Penh. Proceedings of the ITC's 11th Scientific Day, 5-6 May 2022
82. Mut, M., Phann, P., Ung, C., Yuos, O., Sry, V. (2022). Tensile Properties of PE/rPETG blend from 3D printing. Proceedings of the ITC's 11th Scientific Day, 5-6 May 2022
83. Mai, S., Sok, S., Soun, N., Prok, N., Rath, S.S. (2022) Durability of Concrete beam Strengthened with Fibrwrap® System and of Fiber Composite Laminate. Proceedings of the ITC's 11th Scientific Day, 5-6 May 2022
84. Oeung, K., Doung, P., Leelataviwat, S., Han, V. (2022) Assessment Study of Energy Demand in Multi-Story Steel Moment Frames. The Regional Conference in Civil Engineering, 22-23 January 2022, Malaysia. (online)
85. Sreng, L., Seang, S., Azura, A.R., Yos, P. (2021) Characterization of Cambodian Natural Rubber/Common Clay Composites. Proceeding of the 14th AUN/SEED-Net Regional Conference on Materials 2021 & 4th International Postgraduate Conference on Materials
86. Seang, S., Kakda, K., Jaydee, A., Kov, R., Hang, B., Ly, S. C. S., Chan, C., Oy, K., Sitha, K. (2021) Initial Study on Lithological, Hydrothermal Alteration, and Geochemistry for Mineral Exploration in Chhouk District, Kampot Province, Southwest Cambodia. Regional Conference on Natural Disaster, Yangon University Research Center, Yangon, Myanmar
87. Kret, K., Chan, C., Seang, S., Kuoch, T., Kong, S., Kry, R., Boeut, S., Hoeun, S. (2021) Hydrothermal alteration mineral mapping by integrating ASTER and Landsat-8 OLI: A case study in Ratanakiri province, northeast Cambodia. Regional Conference on Natural Disaster, Yangon University Research Center, Yangon, Myanmar
88. Ly, S., Sirisokha, S., Oy, K., Kakda, K., Kov, R., Hang, B., Chorn, S., Jaydee, A., Kong, S., Sitha, K., Kotaro, Y., Koichiro, W., Sophea, B., Tola, S., Seangleng, H. (2021) Preliminary study on lithology, hydrothermal alteration, and soil and rock geochemistry for gold and copper at Area 6, Phnom Sro Ngam Tenement, Chhouk District, Kampot Province, Cambodia. International Symposium on Earth Science and Technology, Japan
89. Chhayo, C., Kakda, K.t, Sirisokha, S., Chanmoly, O., Sitha, K., Reaksmey, K., Sophea, B., Kimhouy, O., Seangleng, H., Jaydee, A., Kong, S. (2021) Hydrothermal alteration mapping from ASTER and Landsat-8 in Kampot Fold Belt, southwest Cambodia. International Symposium on Earth Science and Technology, Japan
90. Leakhena, H., Phalla, T., Srean, A., Dalin, U., Taing, C. (2021) Air Emission Inventory of Factory Boiler and impact to human health. Case Study in Phnom Penh, Cambodia The 6th International Symposium on Conservation and Management of Tropical Lakes” In Conjunction with
91. Leakhena, H., Phalla, T., Srean, A., Dalin, U., Taing, C. (2021-A) Assessment of human health impact of particulate matter formation from industry textile boiler in Cambodia. 15th Regional Conference in Environmental Engineering
92. Leakhena, H., Phalla, T., Srean, A., Dalin, U., Taing, C. (2021-B) Feasibility of air quality standard compliance link with perception of people : case study Phnom Penh Cambodia. Asean young scientist conference
93. Menghor, L., Mouyyi, H., Nallis, K., Sirisokha, S., and Ichhuy, N. (2020) Primary Investigation on lithology and alteration minerals for geothermal resource in Te Teuk Pus, Oral district Kampot Speu province, Cambodia. International of Symposium on Earth Science and Technology. 420-425.
94. Hin, R., Cheng, K., Han, V., Bernard, F., Seang, C., Keryvin, V., Sangleboeuf, J.-C. Flexural strength improvement for structural glass: a numerical study. IOP Conf. Series: Materials Science and Engineering, 849 (2020) 012083. doi:10.1088/1757-899X/849/1/012083

Annex 45. List of publication from WAE Research Unit.

List of Index publications from 2020

1. Song, L., Ribolzi, O., Boithias, L., Xayyathip, K., Valentin, C., Soulileuth, B., Robain, H., de Rouw, A., Sounyafong, P., Silvera, N., Sisouvanh, P., Janeau, J. L., Saveng, I., Oeurng, C., Pierret A. (2025). Soil erosion control in tree plantations on steep slopes: Runoff water and sediment trapping efficiency of riparian grass buffer in mountainous humid tropics. *Ecological Engineering*. <https://doi.org/10.1016/j.ecoleng.2025.107537>. (IF : 3.9)
2. Peng, C., Moniroth, S., Khy, P., Chea, S., Thanh, C., Heng, O., Sarter, S., Cheng, S., Caruso, D.(2024). Antibiotic resistance profiles of sentinel bacteria isolated from aquaculture in Cambodia. *Journal of Water and Health*. doi: <https://doi.org/10.2166/wh.2024.101>. (IF : 2.5)
3. Sao, S., Praise, S., Nishiyama, M. et al. Response of bacterial communities and soil chemistry to flood durations and recovery phases. *Environ Sci Pollut Res* (2024). <https://doi.org/10.1007/s11356-024-35001-2>. (IF : 5.8)
4. Phung, L., Sao, S., Afriani, S., Kumar, A., Watanabe, T. ZnO Nanoparticles in Composted Sewage Sludge Enhance Soil Fertility and Rice Nutrition but Elevate As and Pb Accumulation *Journal of Environmental Chemical Engineering* <https://doi.org/10.1016/j.jece.2024.113606>. (IF : 7.4)
5. Chhoung, Y., Tian, Z., Ma, W., Eang, K.E., Pen, S., Chhuon, K. (2024). Modeling the Underwater Operation Robot Shape and Area of Thrust Surface in Agricultural Ponds Based on CFD Simulation. *Semarak Ilmu CFD Letters*. <https://doi.org/10.37934/cfdl.17.6.151170>. (IF : 1.2)
6. Phoeurn, CA., Orn, C., Tho, T., Degré, A., Ket, P. (2024). Assessing the Feasibility of Alternative Wetting and Drying (AWD) Technique for Improving Water Use Efficiency in Dry-Season Rice Production. *Paddy and Water Environment*. <https://link.springer.com/article/10.1007/s10333-024-01012-5>. (IF : 1.9)
7. Muon, R., Zaiss, R., Lao, C., Ann, V., & Jouquet, P. (2024). Utilization of IGN historical aerial photographs and Google earth for measuring changes in land use and evolution of termite lenticular mound abundance in paddy fields in Cambodia. *Soil Use and Management*. <https://doi.org/10.1111/SUM.13128>. (IF : 5)
8. Ly, S., Uk, S., Theng, V., Kaing, V., & Yoshimura, C. (2024). Integration of life cycle and habitat conditions in modeling fish biomass in the floodplain of the Lower Mekong Basin. *Ecological Modelling*. (IF: 3.1)
9. Sao, S., Ann, V., Nishiyama, M., Praise, S., Watanabe, T. Tracing pathways by which flood duration impacts soil bacteria through soil properties and water-extractable dissolved organic matter: A soil column experiment *Science of The Total Environment* <https://doi.org/10.1016/j.scitotenv.2023.166524>. (IF : 8.2)
10. Sao, S., Praise, S., Watanabe, T. Effect of flood duration on water extractable dissolved organic matter in flood plain soils: A laboratory investigation *Geoderma* <https://doi.org/10.1016/j.geoderma.2023.116392>. (IF : 5.6)
11. Theng V., Sith T., Uk S., Yoshimura C. (2023). Phytoplankton productivity in a tropical lake floodplain system revealed by a process-based primary production model. *Ecological Modelling*. (IF: 3.1)
12. van Emmerik TH, Schreyers LJ, Mellink YA, Sok T, Arias ME. Large variation in Mekong river plastic transport between wet and dry season. *Frontiers in Environmental Science*. 2023 May 9;11:539. (IF: 4.6)
13. Mohamed CA., An, S., Pradit S., Loh, PS., Nitiratsuwan, T., Kobkeattawin, T., Noppradit, P., Le, TP., Oeurng, C., Sok, T., Lee, CW. (2023). Depth Profiles of Microplastic in Sediment Cores in the Mangrove Area of Kuala Gula Mangrove, Malaysia. *Journal of Marine Science and Engineering*. 2023 Jun 14;11(6):1223. (IF: 2.9)

14. Hu, J., Siriporn P., Pei SL., Zengxuan C., Chuanyi G., Thi P., Oeurng, C. et al. (2023). Storage and dynamics of soil organic carbon in allochthonous-dominated and nitrogen-limited natural and planted mangrove forests in southern Thailand. *Marine Pollution Bulletin* 200: 116064. **(IF: 10.1)**
15. Kaing, V., Zhongyu, G., Sok, T., Dilini, K., Florian, B., Yoshimura, C. (2023). Photodegradation of biodegradable plastics in aquatic environments: Current understanding and challenges. *Science of The Total Environment* (2023): 168539. **(IF: 10.75)**
16. Try, S., Takahiro, S., Sophea, RP., Sok, T., Ly, S., Oeurng, C. (2023). Assessing the impacts of climate change and dam development on potential flood hazard and damages in the Cambodian floodplain of the lower mekong basin. *Journal of Hydrology: Regional Studies* 49 (2023): 101508. **(IF: 4.7)**
17. Lai, C., Muon, R., Touch, V., Hin, S., Podwojewski, P., Ket, P., Jouquet, P., Degré, A., Ann. V. (2023). Impact of Biochar from Rice Husk on Nutrient Distribution and Rice Growth and Yield. A Soil Column Experiment. *Soil and plant nutrition*, 2023. **(IF: 3.9)**
18. Phoeurn, CA., Orn, C., Tho, T., Degré, A., Ket, P. (2023). Assessing the Feasibility of Alternative Wetting and Drying (AWD) Technique for Improving Water Use Efficiency in Dry-Season Rice Production. *Paddy and Water Environment*, submitted, 2023.
19. Tha, S., Sot, C., Phol, S., Yan, S., Lai, C., Ket, P. (2023). Estimating Irrigation requirement and scheduling for major crops: Case Study in Kampong Thom, Cambodia. *IOP Conference Series: Earth and Environmental Science*, submitted, 2023
20. Pang, B., Sou, K., Kit, K., Huor, S., Chhim, S., Khorn, S., ... & Bun, S. (2023). Performance evaluation of anaerobic baffled reactor and filter for treating medium-strength wastewater using natural sludge growth and different hydraulic retention times. In *IOP Conference Series: Earth and Environmental Science* (Vol. 1199, No. 1, p. 012040). IOP Publishing. **(IF: 2.25)**
21. Bou, K., Poev, S., Chan, R., Ham, P., & Bun, S. (2023). Destabilization of Emulsion Oil Separation by using Chemical Coagulation Process: Preliminary Investigation for Effective Analysis. In *IOP Conference Series: Earth and Environmental Science* (Vol. 1199, No. 1, p. 012041). IOP Publishing. **(IF: 2.25)**
22. Choun, C., Bun, S., Ham, P., & Chan, R. (2023). Removal of Turbidity, Color, and Oil using Aerated Electrocoagulation-Flotation Reactor. *AIP Proceeding*, 2785 (1), 030044.
23. Ham, P., Bun, S., Wongwailikhit, K., & Painmanakul, P. (2023). Effect of Catalyst and Irradiation Characteristics on Volatile Organic Compounds Degradation in Aqueous Phase using TiO₂ Photocatalyst. *AIP Proceeding*, 2785 (1), 030032. **(IF: 0.41)**
24. Heang, B., Bun, S., Chan, R., & Ham, P. (2023). Comparative Study of Septic Tank, Anaerobic Filter, and Anaerobic Baffled Reactor for Treating Domestic Wastewater. *AIP Proceeding*, 2785 (1), 030030. **(IF: 0.41)**
25. Seng, P., Bun, S., Chan, R., & Ham, P. (2023). Optimize System Configuration and Operation Condition of Anaerobic Baffled Reactor (ABR) and Anaerobic Filter (AF) for Treating Domestic Wastewater. *AIP Proceeding*, 2785 (1), 030042. **(IF: 0.41)**
26. Pen, B., Bun, S., Fagkaew, P., & Painmanakul, P. (2023). Effect of Solid Media Addition on Mass Transfer and Bubble Dynamics in Bubble Column Reactor. *AIP Proceeding*, 2785 (1), 060006. **(IF: 0.41)**
27. Theam, A., & Bun, S. (2023). Optimization of Iron Co-Presence in Airlift Reactor for Arsenic (III) Removal using Respond Surface Methodology. *AIP Proceeding*, 2785 (1), 030040. **(IF: 0.41)**
28. Eng, K., Chan, R., Bun, S., Chan, R., Ham, P., & Sok, T. (2023). Optimization of Nitrate Production from Aquaculture Wastewater in a High-Rate Aerobic Reactor for a Hydroponic Spinach Growth. *AIP Proceeding*, 2785 (1), 030041. **(IF: 0.41)**
29. Muon, R., Ket, P., Sebag, D., Boukbidia, H.A., Podwojewski, P., Hervé, V., Ann, V., Jouquet, P., 2023. Termite constructions as patches of soil fertility in Cambodian paddy fields. *Geoderma Reg.* e00640. <https://doi.org/https://doi.org/10.1016/j.geodrs.2023.e00640> **(IF = 4.2)**

30. Muon, R., Lai, C., Hervé, V., Zaiss, R., Chassagne, F., Bureau-Point, E., Marchand, S., Audibert, M., Berger, J., Wieringa, F., Saviour'e, A., Sok, K., Meunier, J., Ann, V., Jouquet, P. (2023). Abundance, perceptions and utilizations of termite mounds in Cambodia. *Soil Use Manag* 1–13. <https://doi.org/10.1111/sum.12893> (IF: 3.8)
31. Jouquet, P., Muon, R., Traoré, S., Harit, A. (2023). From Thai to Zai : Insects as Example of Threatened Nature-Based Solutions for Sustainable Food Production. *Biodivers. Online J.* 3(4), 1–4. <https://doi.org/BOJ.000566>. 2023. (IF: NA)
32. Wai, M.P., Chem, V., Ean, K.E., Chhin, R., Siev, S., Heu, R. (2022). Accessing the Impact of Floating Houses on Water Quality in Tonle Sap Lake, Cambodia. *Sustainability*, 14, 247. <https://doi.org/10.3390/su14052747> (IF: 3.25)
33. Jouquet, P., Harit, A., Hervé, V., Moger, H., Carrijo, T., Donoso, D., Eldridge, D., Cunha, H., Choosai, C., Janeau, J.L., Maeght, J.L., Thu, T.D., Briandon, A., Skali, M.D., Thuyne, J.V., Mainga, A., Florian, Q., Issa, O., Podwojewski, P., Rajot, J.L., Tureaux, T., Smaili, L., Labiadh, M., Boukbida, H., Shanbhag, R., Muon, R., Ann, V., Cheik, S., Fall, S., Traoré, S., Dupont, S., Chouvenec, T., Mullins, A.J., Syaukani, S., Zaiss, R., Tien, T., Šobotnik, J., Auclerc, A., Qiu, R., Tang, Y., Huot, H., Dussès, D., Bottinelli, N. (2022). The impact of termites on soil sheeting properties is better explained by environmental factors than by their feeding and building strategies, *Geoderma*. *Geoderma*, 412: 115706. <https://doi.org/10.1016/j.geoderma.2022.115706> (IF: 6.1)
34. Chan, R., Chan, R., Sok, T., Bun, S., Kaing, V., Mong, M., Oeurng, C. (2022). Relative Distribution of Pollutants from Urban Canal and Aquaculture Farm onto Natural Wetland of Phnom Penh, Cambodia. *Pollution Research*. (IF: 0.516)
35. Sang, D., Cimetiere, N., Giraudet, S., Tan, R., Wolbert, D., & Le Cloirec, P. (2022). Online SPE-UPLC-MS/MS for herbicides and pharmaceuticals compounds' determination in water environment: A case study in France and Cambodia. *Environmental Advances*, 8, 100212. <https://doi.org/10.1016/j.envadv.2022.100212> (Citescore 1.2)
36. Yang, H., Siev, S., Uk, S. et al. (2022). Relationship between water levels and flood pulse induced by river-lake interaction in the Tonle Sap basin, Cambodia. *Environ Earth Sci* 81, 226. <https://doi.org/10.1007/s12665-022-10353-5> (IF: 2.784)
37. Sok, T., Oeurng, C., Kaing, V., Sauvage, S., Lu, x., Pérez, J. (2022). Nutrient transport and exchange between the Mekong River and Tonle Sap Lake in Cambodia, *Ecological Engineering*, Volume 176, <https://doi.org/10.1016/j.ecoleng.2021.106527> (IF: 4.05)
38. Try, S., Sayama, T., Oeurng, C. et al. (2022). Identification of the spatio-temporal and fluvial-pluvial sources of flood inundation in the Lower Mekong Basin. *Geosci. Lett.* 9, 5 (2022). <https://doi.org/10.1186/s40562-022-00215-0> (IF: 3.543)
39. Chua, S. D. X., Lu, X. X., Oeurng, C., Sok, T., and Grundy-Warr, C. (2022). Drastic decline of flood pulse in the Cambodian floodplains (Mekong River and Tonle Sap system), *Hydrol. Earth Syst. Sci.*, 26, 609–625, <https://doi.org/10.5194/hess-26-609-2022>, (IF: 6.450)
40. Sok, T., Ich, I., Tes, D., Chan, R., Try, S., Song, L., Ket, P., et al. (2022). Change in Hydrological Regimes and Extremes from the Impact of Climate Change in the Largest Tributary of the Tonle Sap Lake Basin. *Water*, 14(9), 1426. MDPI AG. Retrieved from <http://dx.doi.org/10.3390/w14091426> (IF: 3.17)
41. Phy, S. Try, S., Sok, T., Ich, I. Chan, R., Oeurng, C., (2022). Integration of hydrological and flood inundation models for assessing flood events in the lower Prek Thnot River Basin under climate change . *Journal of Hydrologic Engineering* (IF: 2.017)
42. Uk, S., Yang, H., Vouchlay, T., Sok T., Siev, S., Try, S., Oeurng, C., Chihiro, Y., (2022) Dynamics of phosphorus fractions and bioavailability in a large shallow tropical lake characterized by monotonal flood pulse in Southeast Asia. *Journal of Great Lakes Research* (In Press) <https://doi.org/10.1016/j.jglr.2022.04.005> (IF: 2.55)
43. Orieschnig, C., Venot, J.P, Massuel, S., Eang, K., Chhuon, K., Lun, S., Siev, S., Belaud, G. (2022). A multi-method approach to flood mapping: Reconstructing inundation changes in the Cambodian upper mekong delta. *Journal of Hydrology*. <https://doi.org/10.1016/j.jhydrol.2022.127902> (IF: 5.72)
44. Sang, D., Chiemchaisri, W., Chiemchaisri, C. (2022). Purification of polluted surface water by sponge moving bed membrane bioreactor with short hydraulic retention time operation. *Water and Environment Journal*. <http://doi.org/10.1111/wej.12803> (IF: 2.07)

45. Bun, Saret, Penghour Hong, Nattawin Chawaloeshosiya, Sreynich Pang, Sreylla Vet, Phaly Ham, Rathborey Chan, and Pisut Painmanakul. (2022). Development of Integrated Electrocoagulation-Sedimentation (IECS) in Continuous Mode for Turbidity and Color Removal." *ChemEngineering* 6, no. 1: 3 **(IF: 3.18)**
46. Mao, Theara, Davin Sang, Rathborey Chan, and Saret Bun. (2022). Experimental and empirical investigation of commercial and local biocarriers in moving bed bioreactor for treating low-strength domestic wastewater. **(IF: 0.675)**
47. Eng Khun, Rathborey Chan, Saret Bun, Rathboren Chan, Phaly Ham, Ty Sok. (2022). The Optimization of Nitrate Production from Aquaculture Wastewater in a High-Rate Aerobic Reactor for a Hydroponic Spinach Growth **(IF: 0.402)**
48. Borin Heang, Saret Bun, Rathborey Chan, Phaly Ham. (2022). Comparative Study of Septic Tank, Anaerobic Filter, and Anaerobic Baffled Reactor for Treating Domestic Wastewater **(IF: 0.403)**
49. Chakriya Choun, Saret Bun, Phaly Ham, Rathborey Chan. (2022). Removal of Turbidity, Color, and Oil using Aerated Electrocoagulation-Flotation Reactor **(IF: 0.404)**
50. Phaya Seng, Saret Bun, Rathborey Chan, Phaly Ham. (2022). Optimize System Configuration and Operation Condition of Anaerobic Baffled Reactor (ABR) and Anaerobic Filter (AF) for Treating Domestic Wastewater **(IF: 0.405)**
51. Ich, I., Sok, T., Kaing, V., Try, S., Chan, R., & Oeurng, C. (2022). Climate change impact on water balance and hydrological extremes in the Lower Mekong Basin: a case study of Prek Thnot River Basin, Cambodia. *Journal of Water and Climate Change*. **(IF: 2.67)**
52. Ka, K., Sok, T., Lim, S., Ich, I., Chan, R., Song, L., ... & Oeurng, C. (2022). Watershed Health Assessment Using GIS and AHP Methods: Application in Stung Sen River Basin, Cambodia. *Indonesian Journal of Limnology*, 3(1), 18-33. **(IF: 0.41)**
53. Ann, V., A. M. Romani, A. Butturini, (2022). Estimating the hydraulic conductivity in river unconsolidated sediments. A critical analysis of several grain-size empirical approaches. *Serie Correlación Geológica*, 38 (1): 15-25. **(IF: 0.50)**
54. Heu, R., M.P. Wai, S. Siev, V. Chem, K. E. Eang, V. Ann, M. Ateia, C. Yoshimura, (2022). Dissolved Silicon in Lake-floodplain System: Dynamics and Role in Primary Production. *Science of The Total Environment*, 861:160696. <https://doi.org/10.1016/j.scitotenv.2022.160696> **(IF: 10.753)**
55. Teck, V., A. Poortinga, C. Riano, K. Dahal, R. M. B. Legaspi, V. Ann, R. Chea, (2022). Land use and land cover change implications on agriculture and natural resource management of Koah Nheak, Monduliri province, Cambodia. *Remote Sensing Applications: Society and Environment*. In Press. <https://doi.org/10.1016/j.rsase.2022.100895>. **(IF: 3.371)**
56. Sokles Lorn ,Pinnara Ket,Chanmoly Or ,Sela Kong,Dalin Um ,Srean Aun , (2022). Chanreaksmey Taing, Leakhena Hang .Health Impact Assessment from Rice Straw Production in Cambodia.Sci. 2022, 12(20). <https://doi.org/10.3390/app122010276>. **(IF: 2.838)**
57. Chanto Chea, Pinnara Ket, Long Taing, Sela Kong, Dalin Um, Chanreaksmey Taing, Chanmoly Or, Srean Aun4, Leakhena Hang. (2022). Life-Cycle Impact Assessment of Air Emissions from a Cement Production Plant in Cambodia. Vol 11(14). DOI: 10.4236/ojap.2022.114007 **(IF: 0.79)**
58. Chan, R., Chart, C., Wilai, C., Alongkot, B., & Phitsanu, T. (2022). Occurrence of antibiotics in typical pig farming and its wastewater treatment in Thailand. 8 21-29. <https://doi.org/10.1016/j.emcon.2021.12.003> (CiteScore: 9.7)
59. Chhin, R., Siev, S., & Yoden, S. (2021). Time-lagged correlations of pre-monsoon precipitation in the Indochina Peninsula confirmed in a large ensemble simulation dataset. *International Journal of Climatology*, 1–18. Doi: 10.1002/joc.7292. **(IF:4)**
60. Chan, R., Chan, R., Chiemchaisri, W., & Chiemchaisri, C. (2021). Treatment of aquaculture farm effluent containing antibiotics in high-rate membrane bioreactor. *Desalination and water treatment*, 221, 56-63. **(IF:1.2)**
61. Charlotte, J.H., Mauricio, E.A., Zhewen Y., Ty, S., & Michael, C. W. (2021). Plastic transport in a complex confluence of the Mekong River in Cambodia. *Environmental Research Letter*. **(IF:6.7)**
62. Chan, R., Chiemchaisri, C., & Chiemchaisri, W. (2021). Application of Membrane Bioreactor with Sponge Media in Aquaculture Wastewater Treatment. *Journal of Fisheries and Environment*, 45(2), 106-118. **(IF:0.42)**

63. Dai, J., Rad, S., Xu, J., Pen, S., Gan, L., Chen, X., Yu, C., & Zhang, S. (2021). Impacts of climate change versus land use change on recent Lijiang River flood regime, South China. <https://doi.org/10.24850/j-tyca-2021-03-07>. **(IF:0.29)**
64. Rajendra, K., Uk, S. Dilini, K., Siev, S., & Chihiro, Y. (2021). Impact of Water Level Fluctuation on Sediment and Phosphorous Dynamics in Tonle Sap Lake, Cambodia. *Water Air Soil Pollut* 232, 139 (2021). <https://doi.org/10.1007/s11270-021-05084-5>. **(IF:2.5)**
65. Bun, S., Sek, S., Oeurng, C., Manabu, F., Ham, P., & Pisut, P. (2021). A Survey of Household Water Use and Groundwater Quality Index Assessment in a Rural Community of Cambodia. *Sustainability* 13(18), 10071; <https://doi.org/10.3390/su131810071>. **(IF:3.2)**
66. Jain, S., Chhin, R., Ruth, M. D., Saroj K. M., & Shigeo, Y. (2021). A New Graphical Method to Diagnose the Impacts of Model Changes on Climate Sensitivity. *Journal of the Meteorological Society of Japan. Ser. II*. **(IF:2.2)**
67. Sok, T., Oeurng, C., Kaing, V., Sabine, S., Mathias, G. K., & José, M. S. P. (2021). Assessment of Suspended Sediment Load Variability in The Tonle Sap and Lower Mekong Rivers, Cambodia. *Catena*. **(IF:5.1)**
68. Wandee, S., Chan, R., Chiemchaisri, W., & Chiemchaisri, C. (2021). Alteration of antibiotic-resistant phenotypes and minimal inhibitory concentration of *Escherichia coli* in pig farming: Comparison between closed and open farming systems. *Science of The Total Environment*, 781, 146743. **(IF:7.9)**
69. Try, S., Tanaka, S., Kenji, T., Sayama, T., Oeurng, C., Uk, S., Takara, K., Hu, M., & Han, D. (2020). Comparison of Gridded Precipitation Datasets for Rainfall-runoff and Inundation Modeling in the Mekong River Basins. *Plos one* 15, no. 1, e0226814; doi.org/10.1371/journal.pone.0226814.
70. Sophal Try, Shigenobu Tanaka, Kenji Tanaka, Takahiro Sayama, Giha Lee, and Chantha Oeurng. (2020). Assessing the Effects of Climate Change on Flood Inundation in the Lower Mekong Basin Using High-Resolution AGCM Outputs. *Progress in Earth and Planetary Science*, 7, 1-16; doi.org/10.1186/s40645-020-00353-z.
71. Sophal Try, Shigenobu Tanaka, Kenji Tanaka, Takahiro Sayama, Maochuan Hu, Ty Sok, and Chantha Oeurng. (2020). Projection of extreme flood inundation in the Mekong River basin under 4K increasing scenario using large ensemble climate data." *Hydrological Processes* 34, no. 22: 4350-4364.
72. Ty Sok, Chantha Oeurng, Ilan Ich, Sabine Sauvage, and José Miguel Sánchez-Pérez. (2020). Assessment of Hydrology and Sediment Yield in the Mekong River Basin Using SWAT Model. *Water* 12, no. 12: 3503.
73. Tharo Touch, Chantha Oeurng, Yanan Jiang, Ali Mokhtar. (2020). Integrated Modeling of Water Supply and Demand Under Climate Change Impacts and Management Options in Tributary Basin of Tonle Sap Lake, Cambodia. *Water*, 12, 2462; [doi:10.3390/w12092462](https://doi.org/10.3390/w12092462).
74. Hoang Quoc Anh, Thi Phuong Quynh Le, Nhu Da Le, Xi Xi Lu, Thi Thuy Duong, Josette Garnier, Emma Rochelle-Newall, Shurong Zhang, Neung-Hwan Oh, Chantha Oeurng, Chaiwat Ekkawatpanit, Tien Dat Nguyen, Quang Trung Nguyen, Tran Dung Nguyen, Trong Nghia Nguyen, Thi Lieu Tran, Tatsuya Kunisue, Rumi Tanoue, Shin Takahashi, Tu Binh Minh, Huu Tuyen Le, Thi Ngoc Mai Pham, Thi Anh Huong Nguyen. (2020). Antibiotics in Surface Water of East and Southeast Asian Countries: A Focused Review on Contamination Status, Pollution Sources, Potential Risks, and Future Perspectives. *Science of the Total Environment*, 142865; doi.org/10.1016/j.scitotenv.2020.142865.
75. Rathborey Chan, Sirinthrar Wandee, Manna Wang, Wilai Chiemchaisri, Chart Chiemchaisri, Chihiro Yoshimura. (2020). Fate, transport and ecological risk of antibiotics from pig farms along the Bang Pakong River, Thailand. *Journal of Agriculture, Ecosystem & Environment*. 304:107173.
76. Rathborey Chan, Chart Chiemchaisri, Wilai Chiemchaisri. (2020) The effect of sludge recirculation on antibiotic removals in Two-stage membrane bioreactor (MBR) treating livestock wastewater. *Journal of Environmental Health Science and Engineering*. 18: 1541-1553.
77. Heu, R.; Ateia, M.; Yoshimura, C. (2020). Photocatalytic Nanofiltration Membrane Using Zr-MOF/GO Nanocomposite with High-Flux and Anti-Fouling Properties. *Catalysts*, 10, 711.
78. Heu, R.; Ateia, M.; Awfa, D.; Punyapalakul, P.; Yoshimura, C. (2020). Photocatalytic Degradation of Organic Micropollutants in Water by Zr-MOF/GO Composites. *J. Compos. Sci.*, 4, 54. *Journal of Composite Science*.
79. Chhin, R., C. Oeurng, and S. Yoden, (2020). Drought Projection in the Indochina Region Based on the Optimal Ensemble Subset of CMIP5 Models. *Climatic Change*, 162, 687–705.

80. S. Tweed, S. Massuel, J.L. Seidel, K. Chhuon, S. Lun, K.E. Eang, J.P. Venot, G. Belaud, M. Babic, M. Leblanc (2020). Seasonal influences on groundwater arsenic concentrations in the irrigated region of the Cambodian Mekong Delta, *Journal of Science of the Total Environment*, Vol. 728.
81. Chantha Oeurng and Ty Sok. (2020). Assessing changes in flow and water quality emerging from hydropower development and operation in the Sesan River Basin of the Lower Mekong Region. *Sustainable Water Resources Management* 6, no. 2: 1-12.
82. Layheang, Song; Boithias, Laurie; Sengtaheuanghoung, Oloth; Oeurng, Chantha; Valentin, Christian; Souksavath, Bounthan; Sounyafong, Phabvilay; de Rouw, Anneke; Soullileuth, Bounsamay; Silvera, Norbert; Lattanavongkhot, Bounchanh; Pierret, Alain; Ribolzi, Olivier (2020). Understory Limits Surface Runoff and Soil Loss in Teak Tree Plantations of Northern Lao PDR. *Water*, 12, 2327.

List of Non-index publications from 2020

1. Pov, K., Heng, C., Soy, M.,Herbretau, V., Ann, V. Land Use and Land Cover Distribution across Litho-Mineral Alteration of an Irrigated Catchment of the Tonle Sap Lake, Cambodia. (2024). *Techno-Science Research Journal*.
2. Theam, A., Bun, S., Ham, P., Chan, R. Oxidative Precipitation of Arsenic (III) with Iron (II) in Synthetic Groundwater using Diffused Aerator. (2024). *Techno-Science Research Journal*
3. Ngorn, K., Bun, S., Ham, P., Chan, R. (2024). Groundwater Quality Assessment Towards Sand Filter Modification for a Rural Community of Cambodia *Techno-Science Research Journal*.
4. Chork, V., Chhuon, K., Eang, K.E., Lun, S., Doung, R., & Massuel, S. (2024). Investigating Surface Water and Groundwater Interactions Using Ground Electrical Conductivity Measurement in the Bassac River Floodplain *Techno-Science Research Journal*
5. Sath S., MuonR., Zaiss R., Meersmans J., Ann V., Jouquet P. (2024). Environmental Variables Determining Soil Physical Properties and Carbon Content at the Catchment Scale, Stung Chrey Bak Observatory, Cambodia. *Techno-Science Research Journal*.
6. Oeurng, C., Sok, T., Chan, R., Hour, H.M., Koun, P. (2023). Report on Community Fish Refuge (CFR) Pond Monitoring: Surface and Groundwater Study at Sras Ang CFR, Prey Veng Province. *Techno-Science Research Journal*. (2023).
7. Theam, A., Bun, S., Ham, P., Chan, R (2024). Oxidative Precipitation of Arsenic (III) with Iron (II) in Synthetic Groundwater using Diffused Aerator. *Techno-Science Research Journal*. (2024) [In Press]
8. Ngorn, K., Bun, S., Ham, P., Chan, R. (2024). Groundwater Quality Assessment Towards Sand Filter Modification for a Rural Community of Cambodia. *Techno-Science Research Journal*. (2024) [In Press]
9. Chork, V., Chhuon, K., Eang, K.E., Lun, S., Doung, R., & Massuel, S. (2023). Investigating Surface Water and Groundwater Interactions Using Ground Electrical Conductivity Measurement in the Bassac River Floodplain. *Techno-Science Research Journal* 11 (1), 1-6.
10. Khut, S., Heng, O., Peng, C., & Domenico, C. (2022). Preliminary Study on Physicochemical Quality and Antibiotic-Resistant *E. coli* and *Aeromonas* spp. in Aquaculture of *Pangasius* in Kampong Thom Province. *Techno-Science Research Journal* Vol 10.
11. Khen, C., Ich, I., Sok, T., Try, S., & Oeurng, C. (2022). Hydrological Components and Catchment Scale Sediment Delivery in Prek Thot River Basin, Cambodia. *Techno-Science Research Journal*.
12. Huong, O., Samrith, C., Sok, T., Ich, I., Try, S., Chan, R., & Oeurng C. (2022). Trend and Stationarity Analysis of Streamflow in Prek Thnot River Basin. *Techno-Science Research Journal*.
13. Ket, D., Sok, T., Ich, I., Chum, K., Lim, S., Chan, R., Pech, P., & Oeurng, C. (2022). Flow Alteration under Land use Impact in Sen River Basin of The Tonle Sap Lake. *Techno-Science Research Journal*.
14. Yos, C., Ich, I., Sok, T., Chan, R., Kaing, V., Khen, C., & Oeurng, C. (2022). Impact of Climate Change on Sediment and Nitrate load in Prek Thnot River basin of the Lower Mekong River. *Techno-Science Research Journal*.
15. Harn, N., Pen, S., & Heng, S. (2022). Twin Bridge Hydraulics Analysis Using HEC-RAS Model. *Techno-Science Research Journal*
16. Sang, D., Chhun, M., & LUN, S. (2022). Formulizing the design criteria for piped water supply in Cambodia: A case study in Anlong romiet Province. *Techno Science Research Journal*.
17. Khen, C., Ich, I., Sok, T., Try, S., & Oeurng, C. (2021). Hydrological Components and Catchment Scale Sediment Delivery in Prek Thnot River Basin, Cambodia. *Techno Science Journal*.

18. Heng, D., Ty, B., Hul, S. (2021). Study on Nutrients and Heavy Metals in Bottom Sediment of Tonle Sap Lake. *Techno Science Journal*.
19. Heng, S., Kheav, K., Hok, P., Chhuon, K., Ly, S., Kinouchi, T. (2021). Urban Flood Modeling in Phnom Penh Using Flo-2D: Consideration of Climate Change Effect. *Techno Science Journal*.
20. Kol, P., & Doung, R. (2021). Application of SWMM to Explore Possible Climate Change Impact on Urban Stormwater Drainage. *Techno Science Journal*.
21. Lai, C., Vorn, T., Eang, K.E., Ty, B. (2021). Evaluation of Wastewater Treatment Efficiency Utilizing Coconut Fiber as Filter Media. *Techno Science Journal*.
22. Neang, P., Hul, S.H., Endo, G., Miyauchi, K. (2021). Groundwater Arsenic Contamination and Social Needs of Economical Arsenic Removal Technology in Rural Areas of Cambodian Mekong Delta. *Techno Science Journal*.

List of Conferences from 2020

1. Chan, S., Mao, S.V., Mol, S., Tha, S., Naeung, T., Menh, L., Heu, R. (2025). Water Quality Assessment of Groundwater in Mondolkiri Province, Cambodia: Implications for Agriculture. The 14th Scientific Day. Phnom Penh, Cambodia.
2. Chanto, M.T., Massuel, S., Hide, M., Gov, P., Sam, C., Oeurn, K., Hak, S., Cheng, S., Chork, V., Peng, C., Bañuls, A.-L. (2025). Assessment of Water Quality along Bassac River and Its Tributaries in Agricultural Communities. The 14th Scientific Day. Phnom Penh, Cambodia.
3. Chea, S.N., Eng, C., Heng, M.Y., Sreng, L., Pen, C., Has, K., Hean, B., Va, P., Leng, S. (2025). Chemical Characterization of Acid Mine Drainage from Artisanal Mine Site in Chong Plash Commune, Keo Seima District, Mondolkiri Province, Cambodia. The 14th Scientific Day. Phnom Penh, Cambodia.
4. Chheng, P.Y., Khen, C., Lay, L., Menghour, H., Sophearum, P., Sok, T. (2025). Review on Historical Tropical Hurricanes, Typhoons, and Cyclones Frequency, Intensity, and Trajectory. The 14th Scientific Day. Phnom Penh, Cambodia.
5. Chheng, P.Y., Theng, V., Chhoun, K., Ket, P., Sang, D., Heu, R., Menh, L.G., Sim, S. (2025). Impact of City Activities on Macroplastic Accumulation in Two Tonle Sap Lake Tributaries. The 14th Scientific Day. Phnom Penh, Cambodia.
6. China, E., Eang, K.E., Kea, S., Baudron, P. (2025). Hydraulic Propagation of Pesticides at the Watershed Scale: Tonle Sap River Case Study. The 14th Scientific Day. Phnom Penh, Cambodia.
7. Chork, V., Baudron, P., Doung, R., Lun, S., Pen, S., Eang, K., Sok, K., Massuel, S., Van Hanja, J., Balzan, M., Meerman, J., Prak, V., Chhuon, K. (2025). Dynamic Seasonal Variations in River Mixing Patterns at a Major Confluence-Difffluence Site (Chaktomuk Junction, Cambodia) Revealed by Hydrochemical Tracing. The 14th Scientific Day. Phnom Penh, Cambodia.
8. Doung, R., Baudron, P., Chork, V., Lun, S., Pen, S., Eang, K., Sok, K., Massuel, S., Van Hanja, J., Balzan, M., Meerman, J., Chhuon, K. (2025). Spatio-temporal Distribution of Electric Conductivity, Stable Isotopes of Water and Water Level along Tonle Sap River. The 14th Scientific Day. Phnom Penh, Cambodia.
9. Heng, C., Heu, R., Menh, L., Chan, S., Sim, S., Mol, S., Mao, S.V., Theng, V., Ket, P., Sang, D., Chhuon, K. (2025). Monitoring and Evaluation of Macroplastic Pollution in Siem Reap River. The 14th Scientific Day. Phnom Penh, Cambodia.
10. Hout, M.H., Hoan, K., Soy, R., Chhin, R., Sok, T., Layheang, S. (2025). Contemporary Changes in Precipitation Patterns and Extreme Rainfall Indices in Cambodia. The 14th Scientific Day. Phnom Penh, Cambodia.
11. Kaing, V., Yoshimura, C. (2025). Photoinduced Reactive Intermediates Formation from Microplastics and Leachate Dissolved Organic Matter. The 14th Scientific Day. Phnom Penh, Cambodia.
12. Ket, P., Heu, R., Chhuon, K., Sang, D., Theng, V., Snekevik, V.K., Hurley, R., Sim, S., Menh, L. (2025). Macroplastics in Rivers: Present Issues, Challenges and Solutions in Cambodia. The 14th Scientific Day. Phnom Penh, Cambodia.

13. Ly, K.H., Eang, K.E., Pen, S., Doung, R., Chork, V. (2025). Assessment of Inundation at Prek System of Koh Thum Inducing by Bassac River and Regional Precipitation Pattern. The 14th Scientific Day. Phnom Penh, Cambodia.
14. Menh, L., Heu, R., Ket, P., Sang, D., Theng, V., Snekkevik, V.K., Hurley, R., Chan, S., Sim, S., Heng, C., Chhuon, K. (2025). Assessing Macroplastic Pollution in Kampong Khleang River: Urban vs. Rural Pollution and Seasonal Variability. The 14th Scientific Day. Phnom Penh, Cambodia.
15. Nil, R.S., Toth, M. (2025). Investigation of Heavy Metal Adsorption Efficiency on Cambodian Soils. The 14th Scientific Day. Phnom Penh, Cambodia.
16. Pen, S., Chork, V., Lun, S., Doung, R. (2025). Daily Tidal Dynamics at Chaktomuk Confluence by a 2D Hydrodynamic Model. The 14th Scientific Day. Phnom Penh, Cambodia.
17. Pheap, P., Sang, D., Heu, R., Menh, L., Sim, S., Theng, V., Chhuon, K., Ket, P., Snekkevik, V.K., Hurley, R. (2025). Monitoring Macroplastic Accumulation in the Sangker River: Distribution Patterns and Pollution Hotspots. The 14th Scientific Day. Phnom Penh, Cambodia.
18. Phol, M., Pheun, C., Lim, V., Touch, V., Ket, P., Ma, C. (2025). Evaluating Water-Saving Irrigation Methods for Rice Cultivation: Case Study in Cambodia. The 14th Scientific Day. Phnom Penh, Cambodia.
19. Ruos, V., Eang, K.E., Phat, C., Yoeun, S., Sester, M., Baudron, P. (2025). Pesticide Contamination in Groundwater of Agriculturally Intensive Regions of Cambodia: A Case Study of Koh Thum and Kanghot. The 14th Scientific Day. Phnom Penh, Cambodia.
20. Sam, S., Theng, V., Peng, C., Doeurn, S., Heng, O., Phuong, S. (2025). Development of Coconut Filter to Remove Microplastics at Sea Salt Farm, Kampot Province, Cambodia. The 14th Scientific Day. Phnom Penh, Cambodia.
21. Sambath, S., Peng, C., Phoeung, C.L., Phat, C., Chheang, C., Yamada, T., Uchii, K., Nasu, M. (2025). Characterization of Bacterial Communities in Aquatic Environments of Phnom Penh as Potential Bioaerosol Sources Using Nanopore Sequencing. The 14th Scientific Day. Phnom Penh, Cambodia.
22. Sao, S., Sambath, S., Doeurn, S., Peng, C., Ikemori, F., Hata, M., Furuuchi, M., Or, C. (2025). Variations in Particulate Matter (PM_{2.5}) Concentration in Phnom Penh: The Role of Wind Speed and Wind Direction During Daytime and Nighttime. The 14th Scientific Day. Phnom Penh, Cambodia.
23. Sary, V., Doeurn, S., Sorn, S., Sao, S., Peng, C., Ikemori, F., Hata, M., Furuuchi, M., Or, C. (2025). Gravimetric Analysis of PM_{2.5} Mass Concentration: Daily Behavior in Early Dry Season in Phnom Penh, Cambodia. The 14th Scientific Day. Phnom Penh, Cambodia.
24. Sieng, K., Ly, V., Phat, S., Hout, M.H., Sok, T. (2025). The Dependency of the Planting Date on Rainfall in Paddy Fields in the Pursat River Basin. The 14th Scientific Day. Phnom Penh, Cambodia.
25. Sok, T., Chheng, P.Y., Huot, M.H., Ich, I., Koun, P., Chhin, R. (2025). Historical Changes in Extreme Daily Temperature Indices in the Last 3 Decades in Cambodia. The 14th Scientific Day. Phnom Penh, Cambodia.
26. Soy, R., Huong, O.S., Song, L., Sok, T. (2025). Riverbank Erosion Vulnerability Index along Prek Thnot River Basin. The 14th Scientific Day. Phnom Penh, Cambodia.
27. Srong, S., Sao, S., Doeurn, S., Peng, C., Sambath, S., Amin, M., Ikemori, F., Hata, M., Furuuchi, M., Or, C. (2025). Driving Factors of Particulate Matter (PM_{2.5} and PM₁₀) Dynamics During Heavy Air Pollution in Phnom Penh, Cambodia. The 14th Scientific Day. Phnom Penh, Cambodia.
28. Thanh, C., Sarav, B., Yoeuny, S., Khoeurn, K., Amin, M., Phat, C. (2025). Preliminary Assessment of Indoor Air Quality in Residences in Phnom Penh. The 14th Scientific Day. Phnom Penh, Cambodia.
29. Vorng, C., Doeurn, S., Sok, S., Sieng, S., Sao, S., Peng, C., Ikemori, F., Hata, M., Furuuchi, M., Or, C. (2025). Daytime and Nighttime Monitoring of Ultrafine Particulate Matter (PM_{0.1}) During Dry Season in Phnom Penh, Cambodia. The 14th Scientific Day. Phnom Penh, Cambodia.
30. You, T., Sao, S., Doeurn, S., Peng, C., Sambath, S., Ikemori, F., Hata, M., Furuuchi, M., Or, C. (2025). Variability of PM_{2.5} Distribution in Relation to Gaseous Pollutants Concentrations in Phnom Penh, Cambodia. The 14th Scientific Day. Phnom Penh, Cambodia.

31. Yoeun, S., Ruos, V., Thanh, C., Khoeurn, K., Amin, M., Phat, C. (2025). Preliminary Assessment of Air Quality in the Workplace in Phnom Penh. The 14th Scientific Day. Phnom Penh, Cambodia.
32. Guerra, R., Lenczewski, M., Eang, K.E., Lafser, J., Tucker, K. (2025). GC-MS/MS Pesticide Analysis of Cambodian Waters. ASMS 2025 Baltimore
33. Vorng, C., Doeurn, S., Sok, S., Sieng, S., Ngoun, P., Ikemori, F., Hata, M., Sao, S., Peng, C., Or, C., Furuuchi, M. Daily Variations of Particulate Matter Mass Concentration: A Preliminary Observation at Institute of Technology of Cambodia GSGES International Symposium 2024
34. Sorn, S., Doeurn, S., Sok, S., Sieng, S., Ngoun, P., Ikemori, F., Hata, M., Sao, S., Peng, C., Or, C., Furuuchi, M. Comparison of PM_{2.5} Mass Concentration from Two Filter Types in Low-Volume Air Samplers: One-Month Observation at Institute of Technology of Cambodia GSGES International Symposium 2024. Poster presentation
35. You, T., Sao, S., Doeurn, S., Peng, C., Sambath, S., Ikemori, F., Amin, M., Hata, M., Or, C., Furuuchi, M. Air Quality Monitoring in Phnom Penh City: A Focus on Gas Concentrations GSGES International Symposium 2024. Poster presentation
36. Srong, S., Sao, S., Doeurn, S., Peng, C., Sambath, S., Ikemori, F., Amin, M., Hata, M., Or, C., Furuuchi, M. Particulate Matter (PM_{2.5} and PM₁₀) Variations at Four Locations in Phnom Penh GSGES International Symposium 2024. Poster presentation
37. Phuong, S., Sao, S., Doeurn, S., Peng, C., Sambath, S., Ikemori, F., Amin, M., Hata, M., Or, C., Furuuchi, M. (2024). Effect of meteorological conditions on particulate matter concentration in Phnom Penh. GSGES International Symposium 2024. Poster presentation
38. Pov, K., Kret, K., Po, K., Seang, S., Révillion, C., Catry, T., Hostache, R., Herbreteau, V., Ann, V. (2024). Land Surface Temperature and Green Health Vegetation Variability across Lithology and Land Use and Land Cover in the Chrey Bak Catchment KHEOBS Day 2024
39. Tha, S., Sot, C., Phol, S., Yan, S., Lai, C., Ket, P. (2024). Estimating Irrigation requirement and scheduling for major crops: Case Study in Kampong Thom, Cambodia IOP Conference Series: Earth and Environmental Science
40. Eang, K.E., Massuel, S., Keo, S., Doung, R., Van Hanja, J., Yeur, S., Phat, C., Baudron, P., Lenczewski, M. (2024). Pesticide Distribution and Evolution in Prek Systeme in Koh Thum, Kandal Province GOLDSCHMIDT 2024
41. Theng, K., Aun, S., Amin, M., Nat, Y. (2024). Measurement and Evaluation of Particle Number Concentration and Lung Deposited Surface Area Concentration in Open Public Space The 13th Scientific Day of ITC Jointly held with International Symposium on Water Supply and Sanitation and the 1st Symposium of Food Technology, Research and Innovation
42. Ren, R., Phairuang, W., Hata, M., Furuuchi, M., Amin, M., Meng, H., Or, C., Theng, K., Aun, S. (2024). Preliminary Study Of Diurnal And Nocturnal Size-Segregated Particulate Mass Concentration In Atmospheric Air Quality The 13th Scientific Day of ITC Jointly held with International Symposium on Water Supply and Sanitation and the 1st Symposium of Food Technology, Research and Innovation
43. Meng, C., Aun, S., Phairuang, W., Hata, M., Furuuchi, M., Amin, M., Ren, R., Or, C., Theng, K. (2024). Difference of Particulate Matter in Ambient Environment during Daytime and Nighttime in Phnom Penh City The 13th Scientific Day of ITC Jointly held with International Symposium on Water Supply and Sanitation and the 1st Symposium of Food Technology, Research and Innovation
44. Khor, S., Nhet, V., Pen, S. Rainfall Trend Anayis in Cambodia. (2024). The 13th Scientific Day of ITC Jointly held with International Symposium on Water Supply and Sanitation and the 1st Symposium of Food Technology, Research and Innovation
45. Brang, S., Uk, S., Pen, S., Doung, R., Theng, V., Chork, V., Sok, K. (2024). Shoreline Evolution Over the Past Four Decades in Koh Kong, Cambodia The 13th Scientific Day of ITC Jointly held with International Symposium on Water Supply and Sanitation and the 1st Symposium of Food Technology, Research and Innovation

46. Nuth, P., Brang, S., Ban, L., Pen, S. (2024). Extrem Rainfall Event Analysis in Cambodia
The 13th Scientific Day of ITC Jointly held with International Symposium on Water Supply and Sanitation and the 1st Symposium of Food Technology, Research and Innovation
47. Ban, L., Pen, S. (2024). Assessment of an Ungauged Catchment of Rongea River in Koh Ker Heritage Zone, Cambodia
The 13th Scientific Day of ITC Jointly held with International Symposium on Water Supply and Sanitation and the 1st Symposium of Food Technology, Research and Innovation
48. Chy, V., Hout, M., Ich, I., Koun, P., Sok, T. (2024). Evaluation of Naïve Bayes and Naïve Bayes Tree of Machine Learning performance for flood model for the Prek Thnot River Basin
The 13th Scientific Day of ITC Jointly held with International Symposium on Water Supply and Sanitation and the 1st Symposium of Food Technology, Research and Innovation
49. Samai, S., Theng, V. (2024). Predictive Model of Eutrophication in Tonle Sap Lake Using Machine Learning
The 13th Scientific Day of ITC Jointly held with International Symposium on Water Supply and Sanitation and the 1st Symposium of Food Technology, Research and Innovation
50. Krin, K., Ich, I., Meng, H., Song, L., Sok, T. (2024). Reappraisal of Modelling Streamflow in the Mekong River Basin Using the SWAT Model
The 13th Scientific Day of ITC Jointly held with International Symposium on Water Supply and Sanitation and the 1st Symposium of Food Technology, Research and Innovation
51. Pen, S., Kuch, S., Min, T. (2024). Assessment of Flow Characteristics in Flate Terrain under Effect of Drainage Physical Property
The 13th Scientific Day of ITC Jointly held with International Symposium on Water Supply and Sanitation and the 1st Symposium of Food Technology, Research and Innovation
52. Or, S., Hout, M., Song, L., Ich, I., Sok, T. (2024). Water Balance of Catchment Scale in Prek Thnot River of Cambodia and Setting Up for Quantify Nature-Based Solutions Efficiency
The 13th Scientific Day of ITC Jointly held with International Symposium on Water Supply and Sanitation and the 1st Symposium of Food Technology, Research and Innovation
53. Thai, V., Vat, N., Ma, L., Menh, L., Pa, V., Noem, S., Heu, R. (2024). Assessment of Heavy Metals Pollution in Groundwater at the Rural Area of Cambodia
The 13th Scientific Day of ITC Jointly held with International Symposium on Water Supply and Sanitation and the 1st Symposium of Food Technology, Research and Innovation
54. Pa, V., Thai, V., Noem, S., Menh, L., Heu, R. (2024). Seasonal Assessment of Groundwater Quality at Tonle Sap Lake Floodplain Area in Cambodia
The 13th Scientific Day of ITC Jointly held with International Symposium on Water Supply and Sanitation and the 1st Symposium of Food Technology, Research and Innovation
55. Chhoeung S., Lao C., Muon R., Martin A., Sinh S., Rougier J., Sok K., Seng P., Jouquet P. and Bureau-Point E. (2024). Paddy-field multifunctionality in Cambodia. A qualitative study of the ecosystem services provided by termite mounds. The 8th National Conference on Agricultural and Rural Development: Research, Technology and Innovation for Sustainable Agriculture
56. Khan S., Sinh S., Muon R., Ly N., Nhean S., Ket P., Repellin A., Pugen Freitas R., Jouquet P. (2024). Growth of Rice Cultivated on Different Types of Growing Media in Water Limitation Condition
The 8th National Conference on Agricultural and Rural Development: Research, Technology and Innovation for Sustainable Agriculture
57. Pang, B., Sou, K., Kit, K., Huor, S., Chhim, S., Khorn, S., ... & Bun, S. (2023). Performance evaluation of anaerobic baffled reactor and filter for treating medium-strength wastewater using natural sludge growth and different hydraulic retention times
IOP Conference Series: Earth and Environmental Science
58. Bou, K., Poev, S., Chan, R., Ham, P., & Bun, S. (2023). Destabilization of Emulsion Oil Separation by using Chemical Coagulation Process: Preliminary Investigation for Effective Analysis
IOP Conference Series: Earth and Environmental Science
59. Choun, C., Bun, S., Ham, P., & Chan, R. (2023). Removal of Turbidity, Color, and Oil using Aerated Electrocoagulation-Flotation Reactor
AIP Proceeding

60. Ham, P., Bun, S., Wongwailikhit, K., & Painmanakul, P. (2023). Effect of Catalyst and Irradiation Characteristics on Volatile Organic Compounds Degradation in Aqueous Phase using TiO₂ Photocatalyst AIP Proceeding
61. Heang, B., Bun, S., Chan, R., & Ham, P. (2023). Comparative Study of Septic Tank, Anaerobic Filter, and Anaerobic Baffled Reactor for Treating Domestic Wastewater AIP Proceeding
62. Seng, P., Bun, S., Chan, R., & Ham, P. (2023). Optimize System Configuration and Operation Condition of Anaerobic Baffled Reactor (ABR) and Anaerobic Filter (AF) for Treating Domestic Wastewater AIP Proceeding
63. Pen, B., Bun, S., Fagkaew, P., & Painmanakul, P. (2023). Effect of Solid Media Addition on Mass Transfer and Bubble Dynamics in Bubble Column Reactor AIP Proceeding
64. Eng, K., Chan, R., Bun, S., Chan, R., Ham, P., & Sok, T. (2023). Optimization of Nitrate Production from Aquaculture Wastewater in a High-Rate Aerobic Reactor for a Hydroponic Spinach Growth. AIP Proceeding
65. Doung, R., Koa, Ch., Pao, L., Koun, P., Heng, S., Tha, S., 2023. Urban Flood Modeling in Prek Phnov District, Phnom Penh, Cambodia. The 12th Scientific day of ITC, 08-09 June 2023, Institute of Technology of Cambodia, Phnom Penh, Cambodia
66. Vaythouke, S., Doung, R., Sylvain, M., 2023. Seawater Intrusion Modeling in Coastal Aquifer of the Sihanoukville City by using SEAWAT-GMS Model. The 12th Scientific day of ITC, 08-09 June 2023, Institute of Technology of Cambodia, Phnom Penh, Cambodia
67. Oeurn, S., Sorn, P., Sem, S., Eang, K.E., & Massuel, S. (2023). Hydrogeochemistry and Quality Assessment of Groundwater in Coastal Area, Sihanoukville. The 12th Scientific Day of ITC "Engineering Technology and Innovation toward the Development of Digital Economy and Society", June 08-09, 2023. Institute of Technology of Cambodia.
68. Ly, V., Peng, C., Heng, O., Domenico, C. (2023). Antibiotic-Resistant *Escherichia coli* and *Aeromonas* spp. in Mono Cage Culture of *Channa Micropeltes*. The 14th International Conference on Environmental and Rural Development, at Angkor Paradise Hotel, Siem Reap, Cambodia, 03-05 March, 2023.
69. Samrith, C., Sok, T., Try, S., Ich, I., Chan, R., Oeurng, C. (2022). Assessing flood risk using analytical hierarchy process (AHP) and geographical information system (GIS): application in Prek Thnot river basin, THA 2022 International Conference, January 2022.
70. Huong, O., Try, S., Sok, T., Phy, S.R., Chan, R., Oeurng, C. (2022). Historical flood simulation and evaluation the performance of gridded precipitation dataset in Prek Thnot river basin, THA 2022 International Conference, January 2022.
71. Phy, S.R., Try, S., Sok, T., Ich, I., Oeurng, C. (2022). Assessing Flood Inundation in the Lower Prek Thnot River Basin under Climate Change Using RRI Model Coupled with SWAT, THA 2022 International Conference, January 2022.
72. Tes, D., Sok, T., Ich, I., Song, L., Chan, R., Oeurng, C. (2022). Improving Flood Management through Future Reservoir Development and Operation in the Tonle Sap Largest Tributary, THA 2022 International Conference, January 2022.
73. Try, S., Sayama, T., Sok, T., Phy, S.R., Oeurng, C. (2022). Real-time Flood Forecasting Using Numerical Weather Prediction System Through NICAM-LETKF Data Assimilation in the Prek Thnot River, Cambodia, EGU General Assembly, May 2022.
74. Try, S., Sayama, T., Sok, T., Ly, S., Oeurng, C. (2022). Impact of Climate Change and Dam Construction on Rice Damages in the Cambodian Floodplain of the Mekong River Basin, THA2022 International Conference, January 2022.
75. Khut, S., Peng, C., Heng, O., Domenico, C. (2022). Water Quality and Survey on Knowledge, Attitude, And Practices of Antibiotic Use and Resistance of Farmer in Aquaculture of *Pangasius* Specie. 1th

- Scientific Day Conference on “Smart Technology for Sustainable Economic Growth”, May 2022, Phnom Penh.
76. Tes, D., Ich, I., Sok, T., Say, V., Chan, R., Try, S., Song, L., Oeurng, C. (2022). Extreme Flow Reduction through the Integration of Hydrological and Reservoir Operation Models: The Case Study of Sen River Basin in Cambodia, the 11th Scientific Day Conference on “Smart Technology for Sustainable Economic Growth”, May 2022, Phnom Penh.
 77. Koun, P., Sok, T., Ich, I., Tes, D., Try, S., Oeurng, C. (2022). Spatial distribution of groundwater recharge and trend in Cambodia Mekong Delta, the 11th Scientific Day Conference on “Smart Technology for Sustainable Economic Growth”, May 2022, Phnom Penh.
 78. Huong, O., Try, S., Sok, T., Phy, S.R., Chan, R., Oeurng, C. (2022). Flood Modeling and Satellite Precipitation Datasets Evaluation in the Prek Thnot River Basin of the Lower Mekong River, the 11th Scientific Day Conference on “Smart Technology for Sustainable Economic Growth”, May 2022, Phnom Penh.
 79. Khoeun, C., Sok, T., Hout, M., Koun, P., Ith, S., Tes, D., Ich, I., Try, S., Oeurng, C. (2022). Extreme Rainfall Indices and Trends in Stung Sen River Basin, the Largest Tributary of Tonle Sap Lake Basin, the 11th Scientific Day Conference on “Smart Technology for Sustainable Economic Growth”, May 2022, Phnom Penh.
 80. Chann, K., Sok, T., Oeurng, C., Khoeun, R., Visessri, S., Sor, R., Null, H.S. (2022). Assessment of Hydrological Drought Features Over the Lower Mekong’s Tributaries: A Case Study in Srepok River Basin, the 11th Scientific Day Conference on “Smart Technology for Sustainable Economic Growth”, May 2022, Phnom Penh.
 81. Chhom, N., Chhit, S., Chhum, T., Try, S., Song, L., Chhin, R. (2022). Evaluation of observed gridded rainfall data for climate change study over Cambodia. Proceedings of the 11th Scientific Day of ITC, May, 2022, Phnom Penh
 82. Wai, M.P., Chem, V.; Heu, R. (2022). Assessment of Dissolved Silicon in Surface water and sediment in Tonle Sap Lake. Proceedings of the 11th Scientific Day of ITC, May, 2022, Phnom Penh
 83. Muon, R., Lai, C., Bureau-Point, E., Chassagne, F., Wieringa, F., Berger, J., Sok, K., Audibert, M., Podwojewski, P., Marchand, S., Ann, V., and Jouquet, P. (2022). Termite mounds in Cambodian paddy fields. Are they always kept for improving soil quality? (No. EGU22-55). Copernicus Meetings. p. 5194 at <https://doi.org/10.5194/egusphere-egu22-55>
 84. Chann, K., Sok, T., & Oeurng, C. (2022) Investigation of hydrological alteration in Sekong and Sesan River Basins of the Lower Mekong Basin, The 11th Scientific Day Conference on “Smart Technology for Sustainable Economic Growth” May 2022, oral presentation.
 85. Hen, C., Sok, T., Try, S., Chan, R., Ich, I., & Oeurng, C. (2022). Association between extreme precipitation and hydrological extreme in Prek Tnot River Basin of the Lower Mekong River in Cambodia, 4th International Conference on Environment, Resources and Energy Engineering (EREE 2022), June 10-12, 2022 in Bangkok, Thailand.
 86. Chan R., Sok, T., Veth, V., Phy, S., Try, S., Ich, I., Oeurng, C. (2022). Assessment of Annual Streamflow Change Under Climate Change Scenarios in Prek Thnot River of the Lower Mekong Basin, Cambodia, 4th International Conference on Environment, Resources and Energy Engineering (EREE 2022), June 10-12, 2022 in Bangkok, Thailand.
 87. Lay, V., Doung, R., & Pen, S. (2022). Application of Water Quality Index in GIS Tool to Assess the Quality of Groundwater at Preah Sihanouk Province, Cambodia. Proceedings of the 11th Scientific Day Conference on “Smart Technology for Sustainable Economic Growth”, May 2022, Phnom Penh
 88. Sang, D., Cimetiere, N., Giraudet, S., Tan, R., Wolbert, D., & Le Cloirec, P. (2022). Effect of simultaneous dosing PAC and Coagulant on Adsorption-Desorption of organic micropollutant during coagulation-flocculation-sedimentation process. JEM-3M, Rennes.
 89. Leakhena Hang, Sokles Lorn, Srean Aun, Dalin Um, Chanreaskmey Taing. (2022). Assessment of People’s Perception of Air Quality in Phnom Penh, the Capital City of Cambodia. Malaysia

90. Leakhena Hang, Phalla Try, Srean Aun, Dalin Um, Sela Kong, Chanreasksmey Taing and Chanmoly Or. (2022). Springer book series: Environmental Science and Engineering. Japan
91. Sopannha Chy, Srean Aun, Leakhena Hang, Muhammad Amin, Mitsuhiko Hata, Chanmoly Or, Sela Kong, Chanreasksmey Taing, Dalin Um, Masami Furuuchi. (2022). Determination of Particulate Matters and Total Suspended Particles Emit from Incense Burning. IOP Conference Series: Earth and Environmental Science. Phnom Penh
92. Pengsreng Ngoun, Srean Aun, Muhammad Amin, Leakhena Hang, Mitsuhiko Hata, Chanreasksmey Taing, Sela Kong, Chanmoly Or, Dalin Um, Masami Furuuchi. (2022). Monitoring Particulate Matters and Total Suspended Particles Along the Roadside and Public Area
93. Khoeun, C., Sok, T., Try, S., Chan, R., Ich, I., Chan, K., Oeurng, C. (2021). Assessing Flood Hazard Index using Analytical Hierarchy Process (AHP) and Geographical Information System (GIS) in Stung Sen River Basin, the 9th AUN/SEED-Net Regional Conference on natural Disaster (RCND), December 2021.
94. Khun, E., Chan, R., Chan, R., Bun, S., & Chart, C. (2021). Optimization of hydraulic retention time (HRT) in high-rate aeration tank for maximum nitrate production from aquaculture wastewater. The 10th Scientific Day of ITC, May 2021.
95. Chan, R., Chan, R., Wandee, S., Manna, W., Wilai, C., Chart, C., & Chihiro, Y. (2021). Fate and transport of antibiotics from pig farm along the Bang Pakong River, Thailand. The 13th AUN/SEED-Net Regional Conference on Chemical Engineering (RCChE-2020), 04- 05 February 2021.
96. Kaing, V., Ilan, I., Lieng, T., Yos, C., Chan, R., Chan, R., Song, L., Mong, M., Oeurng, C., & Sok, T. (2021). Application of Multivariate Techniques in the Evaluation of Spatial Surface Water Quality in an Urbanized Floodplain Area in Cambodia. The 13th AUN/SEED-Net Regional Conference on Chemical Engineering (RCChE-2020), Phnom Penh, Cambodia.
97. Heang, B., Chan, R., Chuy, V., & Bun, S. (2021). Technical Review and Challenge of Various Decentralized Anaerobic Treatments for Domestic Wastewater. The 10th Scientific Day of ITC.
98. Seng, P., Chan, R., & Bun, S. (2021). Recent Research and Development of Anaerobic Baffled Reactor and Filter for Wastewater Treatment: A Review. The 10th Scientific Day of ITC.
99. Ka, K., Khe, S., Chan, R., Chan, R., Tes, D., Kaing, V., Oeurng, C., & Ty, S. (2021). Seasonal Dynamic on Occurrence and Distribution of Pollutants from Urban Canal and Aquaculture Farm to Tamouk Lake, a Floodplain Urbanized Area in Phnom Penh. The 10th Scientific Day of ITC, May 2021.
100. You, R., Hok, S., Sieng, S., Ty, B. (2021). The Preliminary of Arsenic Removal from Groundwater by utilizing Electro-Chemical Arsenic Remediation (ECAR). The 10th Scientific Day of ITC, May 2021.
101. Nhem, V., Siev, S., Chhin, R., Ung, P., Fuji, H., & Chhihiro, Y. (2021). Water Quality Mapping Using High Resolution Satellite Image Sentinel-2. The 13th AUN/SEED-Net Regional Conference on Chemical Engineering 2021
102. Thoeurn, T., Tri, W. H., & Chhin, R. (2021). Application of Statistical Downscaling for Seasonal Rainfall Forecasts in Cambodia: A Application of Statistical Downscaling for Seasonal Rainfall Forecasts in Cambodia: A Comparison between Constructed Analogue and Bias Correction Methods. The 13th AUN/SEED-Net Regional Conference on Chemical Engineering
103. Sang, D., Tan, R., & Pierre, L. C. (2021). Kinetic and Equilibrium Studies of Caffeine Adsorption on Different Type of Activated Carbons. The 10th Scientific Day of ITC, May 2021.
104. Or, T., Sang, D., Chanto, M.T., Tan, R. (2021). Natural Organic Matter Removal in Drinking Water Treatment by Combination of Adsorption and Coagulation Processes: A Comprehensive Review. The 10th Scientific Day of ITC, May 2021.
105. Meng, C., Lun, S., Sith, R., & Sang, D. (2021). Formulizing the Design Criteria for the Piped Water Supply in Urban Area of Cambodia. The 10th Scientific Day of ITC, May 2021.
106. Visal, R., Sith, R., & Lun, S. (2021). Assessment of Hydraulic Performance of Water Supply System in Takhmao City, Using Modeling Approach, Proceedings of the 10th Scientific Day of ITC, May 6, 2021, Phnom Penh.

107. Sona, Y., Pen, S., & Lun, S. (2021). 2D-Fluvial Hydraulic Characteristic Assessment at Chaktomuk Junction, Phnom Penh City, Proceedings of the 10th Scientific Day of ITC, May 6, 2021, Phnom Penh.
108. Ekkawatpanit, Tien, D. N., Quang, T. N., Tran, D.N., Trong, N., Thi, L., Tatsuya, K., Rumi T., Shin, T., Tu ,B. Huu, T., Thi, N., Thi, A. (2020). Antibiotics in Surface Water of East and Southeast Asian Countries: A Focused Review on Contamination Status, Pollution Sources, Potential Risks, and Future Perspectives. *Science of the Total Environment*, 142865; doi.org/10.1016/j.scitotenv.2020.142865.
109. Chan, R., Wandee, S., Wang, M., Wilai, C., Chart, C., Chihiro, Y. (2020). Fate, transport and ecological risk of antibiotics from pig farms along the Bang Pakong River, Thailand. *Journal of Agriculture, Ecosystem & Environment*. 304:107173.
110. Chan, R., Chart, C., Wilai, C. (2020). The effect of sludge recirculation on antibiotic removals in Two-stage membrane bioreactor (MBR) treating livestock wastewater. (2020). *Journal of Environmental Health Science and Engineering*. 18: 1541- 1553.
111. Heu, R.; Ateia, M.; Yoshimura, C. (2020). Photocatalytic Nanofiltration Membrane Using Zr-MOF/GO Nanocomposite with High-Flux and Anti-Fouling Properties. *Catalysts*, 10, 711.
112. Heu, R.; Ateia, M.; Awfa, D.; Punyapalakul, P.; Yoshimura, C. (2020). Photocatalytic Degradation of Organic Micropollutants in Water by Zr-MOF/GO Composites. *J. Compos. Sci.*, 4, 54. *Journal of Composite Science*.
113. Chhin, R., C. Oeurng, and S. Yoden, (2020). Drought Projection in the Indochina Region Based on the Optimal Ensemble Subset of CMIP5 Models. *Climatic Change*, 162, 687–705.
114. S. Tweed, S. Massuel, J.L. Seidel, K. Chhuon, S. Lun, K.E. Eang, J.P. Venot, G. Belaud, M. Babic, M. Leblanc (2020). Seasonal influences on groundwater arsenic concentrations in the irrigated region of the Cambodian Mekong Delta, *Journal of Science of the Total Environment*, Vol. 728.
115. Song, L., Boithias, L., Oloth, S., Oeurng, C., Valentin, C., Bounthan, S., Sounyafong, P., Anneke, R., Bounsamay, S., Silvera, N., Bounchanh, L., Alain, P., Olivier, R. (2020). Understory Limits Surface Runoff and Soil Loss in Teak Tree Plantations of Northern Lao PDR. *Water*, 12, 2327.

Annex 46. List of publications in Techno-Science Research Journal in Volume 12.

N°	Title of papers published in volume 12 (2024)	Research Unit
Volume 12 and Issue 1		
1	Word Spotting on Khmer Palm Leaf Manuscript Documents <i>Vannkinh Nom, Dona Valy, Sokkhey Phauk, Seng Hak Leng</i>	MIT
2	Text Image Reconstruction and Reparation for Khmer Historical Document <i>Chanchen Pork, Dona Valy, Sokkhey Phauk</i>	MIT
3	Enhancing the Accuracy and Reliability of Docker Image Vulnerability Scanning Technology <i>Vannaroeth Korn, Kimheng Sok Dona Valy</i>	MIT
4	Effect of Organic Acid and Commercial Washing Solutions for Bacteria Removal from Lettuce Collected from Market in Phnom Penh <i>Panhavatey Sokhom, Chanthol Peng, Oudam Heng, Monychot Tepy Chantho, Dany Hak, Rath Leng</i>	WAE
5	Comparison of Control Performance for a Low-cost DC Motor with Single-loop and Cascade Control Architectures <i>Soksery Srey, Sarot Srang</i>	MIT
6	Walkability and importance assessment of pedestrian facilities in Phnom Penh City <i>Sokhit Plack, Veng Kheang Phun, Panha Yang, Kimnennh Taing</i>	MSS
7	Design of Multi-Layer Planar Electromagnetic Wave Absorber Using 1D-FDTD Integrated with ASA and Gradient Descent Optimization Method <i>Dara Chun, Kosorl Thourn, Sokchenda Sreng</i>	ETM
8	Assessment of Proximate Chemical Composition of Cambodian Rice Varieties <i>Sovanndara Soem, Hengsim Phuong, Vattana Mom, Pisal Yong, Sivmey Hor, Lyda Chin, Hasika Mith</i>	FTN
9	Comparative Analysis of Different Clustering Techniques in Hybrid AC/DC Microgrid <i>Yoklin Neov, Oudaya Eth, Kimsrornn Khon</i>	ETM
10	Decentralized Battery Energy Storage Integration into an Optimal Grid-Connected PV System with Zero Power Injection Considerations <i>Kimtheng Thieng, Vannak Vai, Oudaya Eth, Samphors Eng</i>	ETM
Volume 12 and Issue 2		
11	Service Restoration in the Distribution System with Voltage Control Devices using Improved Sequential Opening Branches (ISOB) <i>Sokleap Heang, Vannak Vai, Samphors Eng</i>	ETM

12	Physico-chemical Characteristics of Rice-based Cereal Processed by Twin-screw Extrusion and Microwave Cooking <i>Rathana Sovann, Hasika Mith, Pichmony Ek, Hassany Ly, Hengsim Phoung, Sokuntheary Theng</i>	FTN
13	Investigation of the Influence of Extrusion Conditions on Cambodian Extruded Rice Vermicelli <i>Hassany Ly, Hengsim Phoung, Rathana Sovann, Pichmony Ek, Sokuntheary Theng, Sreyroth Puth, Hasika Mith</i>	FTN
14	Application of High-Pressure and High-Temperature Reactor for Extraction of Essential Oil from Kaffir Lime Peel <i>Keakaknika Ly, Peany Houng</i>	FTN
15	Optimal Placement of Electric Vehicle Charging Stations Using Mixed-Integer Linear Programming: A Case Study in Cambodia <i>Sophanarith Buntheoun, Bunthern Kim, Vannak Vai, Monyvathna Chheng</i>	ETM
16	Minimum Standard of Traffic Safety Devices at Primary School Zone Black Spot in Phnom Penh <i>Keo SOM Oeurn, Veng Kheang Phun, Panha Yang</i>	MSS
17	Should water taxi service in Phnom Penh be abandoned or sustained? <i>Sothearo Sam, Veng Kheang Phun, Panha Yang</i>	MSS
18	Displacement-Based Formulation with Non-Penetration Constraint for Planar Composite Beams in Partial Interaction Using the Coupled Connector Model <i>Thaileng Oeng, Pisey Keo, Khandaker M. Anwar Hossain, Virak Han</i>	MSS
19	Evaluate the Potential Changes in Physico-Chemical and Microbiological Quality of Spicy Sour Seasoning during Storage <i>Davin Pheap, Seanghai Hoeun, Elen Morm, Sokneang In</i>	FTN
20	Effect of Different Water-Saving Irrigation Methods for Rice Cultivation, Case Study in Cambodia <i>Mengheak Phol, Channntola Sot, Sathea Yan, Chenda Lai, Pinnara Ket, Chengxiang Ma, Vanndy Lim, Veasna Touch</i>	WAE
Volume 12 and Special Issue		
21	The 13 th Scientific Day (Catalyzing Innovation: Human Capital, Research, and Industry Linkages)	ETM= 6 FTN= 27 MIT= 23 MSS= 10 WAE=16
22	Earth Resources and Geo-Environment Technology (36 papers)	

Annex 47. List of Foreign Students at ITC.

No	Civilité	Nom et prénom	Départ.	Date d'arrivé	Date de départ	University d'origine	Pays	Thème (Quel est le sujet du stage?)	Financement
1	Mlle	HORTEMEL Ariane	GIC	07-10-2024	08-02-2025	INSA Rennes	France	Student Exchange	Self-funded
2	Mlle	MILA Gaborieau	GIC	07-10-2024	08-02-2025	INSA Rennes	France	Student Exchange	Self-funded
3	M.	COTILLARD Valentin	GIC	07-10-2024	08-02-2025	INSA Rennes	France	Student Exchange	Self-funded
4	Mlle	AUTAIN Camille	GIC	07-10-2024	08-02-2025	INSA Rennes	France	Student Exchange	Self-funded
5	Mlle	BERGER Claire	GIM	09-09-2024	10-01-2025	ECAM LaSalle	France	Student Exchange	Self-funded
6	M.	DAWUTH Willie	GIM	09-09-2024	10-01-2025	ECAM LaSalle	France	Student Exchange	Self-funded
7	M.	DRUILLETTE Bastien	GIM	09-09-2024	10-01-2025	ECAM LaSalle	France	Student Exchange	Self-funded
8	M.	GARDNER Florian	GIM	09-09-2024	10-01-2025	ECAM LaSalle	France	Student Exchange	Self-funded
9	M.	THEOPHANE, Marc, Yves, Roger DAURY	GS	10-02-2025	10-08-2025	Institut polytechnique de Grenoble	France	Student Exchange	EDC-AFD-EU
10	M	YAMADA Ryosuke	GGG	18-08-2025	04-09-2025	Kyushu University	Japan	Student Exchange	JASSO Scholarship
11	M	TETARD Olivier	GGG	07-10-2024	07-02-2025	INSA de Rennes	France	Student Exchange	INSA de Rennes
12	M	JOUBERT Antoine	GGG	07-10-2024	07-02-2025	INSA de Rennes	France	Student Exchange	INSA de Rennes
13	M	BARABE Julien	GGG	07-10-2024	07-02-2025	INSA de Rennes	France	Student Exchange	INSA de Rennes
14	M	DJEHA Hugo	GGG	07-10-2024	07-02-2025	INSA de Rennes	France	Student Exchange	INSA de Rennes

15	Mlle	Abdul Kadir Nur Aida Nazira Malim	GGG	10-12-2024	22-12-2024	Universiti Sains Malaysia	Malaysia	Student Exchange	Universiti Sains Malaysia
16	Mlle	Aliyas Nurul Afikah	GGG	10-12-2024	22-12-2024	Universiti Sains Malaysia	Malaysia	Student Exchange	Universiti Sains Malaysia
17	Mlle	Asward Tihani	GGG	10-12-2024	22-12-2024	Universiti Sains Malaysia	Malaysia	Student Exchange	Universiti Sains Malaysia
18	Mlle	Nurul Afiqak binti Alias	GGG	10-12-2024	22-12-2024	Universiti Sains Malaysia	Malaysia	Student Exchange	Universiti Sains Malaysia
19	Mlle	Mohamad Munir Nur Aisyah	GGG	10-12-2024	22-12-2024	Universiti Sains Malaysia	Malaysia	Student Exchange	Universiti Sains Malaysia
20	Mlle	Fadhilah Binti Mohd Ismail	GGG	10-12-2024	22-12-2024	Universiti Sains Malaysia	Malaysia	Student Exchange	Universiti Sains Malaysia
21	Mlle	Casanova Danisse	GGG	10-12-2024	22-12-2024	Caraga State University	Philippines	Student Exchange	Caraga State University
22	M.	Buyante Terence Joseph	GGG	10-12-2024	22-12-2024	Caraga State University	Philippines	Student Exchange	Caraga State University
23	Mlle	Telin Fatima Jane	GGG	10-12-2024	22-12-2024	Caraga State University	Philippines	Student Exchange	Caraga State University
24	M.	Graban Matt Andrew	GGG	10-12-2024	22-12-2024	Caraga State University	Philippines	Student Exchange	Caraga State University
25	M.	Yu Jasey Jay	GGG	10-12-2024	22-12-2024	Caraga State University	Philippines	Student Exchange	Caraga State University
26	M.	Polpitak Worathon	GGG	10-12-2024	22-12-2024	Chulalongkorn University	Thailand	Student Exchange	Chulalongkorn University
27	Mlle	Ninnangkul Anantaya	GGG	10-12-2024	22-12-2024	Chulalongkorn University	Thailand	Student Exchange	Chulalongkorn University
28	M.	Joé Magnen	GTI	10-07-2024	15-07-2024	Université des Nantes	France	Student Exchange	Conseil régional des pays de la Loire

29	Mlle	Léa DJOUAL	GRU	01-09-2024	30-10-2024	Université de Lorraine, École Nationale Supérieure d'Agronomie et des Industries Alimentaires (ENSAIA), France	France	Internship	Self-funded
30	Mlle	Julia Anna Arunreaksmey MEERMAN	GRU	02-09-2024	24-01-2025	Avans University of Applied Sciences, School of Life Sciences and Technology (ALST)	Netherland	Internship	Self-funded
31	M.	Oum Ronald	GRU	17-06-2024	21-06-2024	lycée René DESCARTES, Phnom Penh	Cambodia	Internship	Self-funded
32	M.	Nouphoeung Puthisa	GRU	17-06-2024	21-06-2024	lycée René DESCARTES, Phnom Penh	Cambodia	Internship	Self-funded
33	M.	Arthur DURAND	GRU	03-06-2024	29-09-2024	Centre des Études Supérieures Industrielles (CESI)	France	Internship	Self-funded
34	M.	Martin KILLIAN	GRU	03-06-2024	29-09-2024	Centre des Études Supérieures Industrielles (CESI)	France	Internship	Self-funded
35	Mlle	Soukaina AJRAOUI	GRU	05-06-2024	01-09-2024	IMT Nord Europe Engineering Degree in Plastics and Composite materials in Partnership with Polyvia Formation	France	Internship	Self-funded
36	Mlle	ALBERT Juilette	GRU	21-01-2025	20-03-2025	Sorbonne University, Paris	France	Internship	Self-funded

37	Mlle	MAHINA HITTINGER	GRU	20-01-2025	13-06-2025	Plant Biology Université Claude Bernard Lyon 1	France	Internship	Self-funded
38	M.	SEVENIER-FERRON Colombe	GRU	16-12-2024	20-12-2024	lycée René DESCARTES	Cambodia	Internship	Self-funded
39	M.	Germain Debray	GRU	15-02-2025	20-04-2025	École normale supérieure Paris- Saclay	France	Internship	Self-funded
40	M.	Denus Cedric	GIM	09-10-2024	09-02-2025	INSA de Rennes	France	Student Exchange	Self-funded
41	Mlle	Anne-Lise EBERLIN	GTR	09-10-2024	17-01-2025	INSA de Rennes	France	Student Exchange	Self-funded
42	Mlle	Katheline JANNIN	GIC	2/13/2025	Jul 5, 2025	INSA Rennes	France	Student Exchange	
43	Mr.	DAVID Louis-Marie	GCI	Fevrier 2025		INSA-Rennes	France	2nd Semester	
44	Mlle	GENON Mazarine	GCI	Fevrier 2025		INSA-Rennes	France	2nd Semester	
45	Mr.	LEVOT Léo	GCI	Fevrier 2025		INSA-Rennes	France	2nd Semester	
46	M.	GAUCHER Thomas	GIM	17/02/2025	07/07/2025	INSA de Toulouse	France	2nd Semester	Self-funded
47	M.	LELOUARD Batiste	GIM	17/02/2025	07/07/2025	INSA de Toulouse	France	2nd Semester	Self-funded
48	Mlle	ID EL Mouden Kaoutar	RIC	02-06-2025	15-08-2025	IMT Nord Europe/ISPA	France	Internship	Self-funded
49	Mlle	CHABAUD Maelle	FTN	14-04-2025	13-06-2025	AIX-Marseille Université	France	Internship	Self-funded
50	Mlle	MACCOTTA Lara	FTN	14-04-2025	13-06-2025	AIX-Marseille Université	France	Internship	Self-funded
51	Mlle	LASSERIE Yaelle	FTN	14-04-2025	13-06-2025	AIX-Marseille Université	France	Internship	Self-funded

Annex 48. Organizing Seminars and Workshops for Lecturers and Students.

No.	Date (DD-MM-YY)	Subject	Organizer (Faculty/Department)	Co-organizer (Industry)	Participants
1	19-Jun-2024	Experience Sharing Seminar	GGG	Renaissance Minerals Cambodia	GGG-Students
2	31-Jun-2024	Seminar on internship program of Mega Asset Management	FGC-GCI	Mega Asset Management	GCI-Student
3	5-Jul-2024	Landslide Hazard with the Impact of Climate Change	GGG	National Chung-Hsing University	GGG-Lecturers-Students
4	10-Jul-2024	Seminar on "Business Development" by expert from ARES-CCD (R2)	UIL	ARES-CCD (R2)	Dr. Sokneang In (Dean of GCA and PI of R2) Dr. Phanny Yos (Deputy-Director of RIC) Dr. Chanvorleak Phat (Head of FTN)
5	17-Jul-2024	PPAP job seminar	GTI	Phnom Penh Autonomous Port	GTI students
6	17-Jul-2024	CAMEL's Future Engineer Program	FGC-GCI	CHIP MONG Concrete	GCI-Lecturer-Student
7	7-Aug-2024	Improvement of Road Safety & Air Quality in Cambodia Through Intelligent Traffic Management (IRSAQ): Invitation to the training workshop on Data Management and Protection and Air Quality Monitoring and Mitigation Measures	FGC-GTI	GIZ, DKT, MPWT	GTI-Lecturer-Student
8	8-Aug-2024	The Project for Capacity Development on Comprehensive Traffic Management Planning and Traffic Control Center Operation and Maintenance in Phnom Penh Capital City	FGC-GTI	JICA	GTI-Lecturer-Student
9	8-Sep-2024	ITC-EASTS Special seminar on Transport development in Asia during COVID-19 Pandemic and beyond	GTI	Eastern Asia Society for Transportation Studies	GTI and EASTS members
10	23-Oct-2024	Advanced Innovation Technology on Structural Rehabilitation and Strengthening for our modern-Day Structural Challenge since 1985	FGC-GCI	Fyfe Asia Ltd and ASiD Co., Ltd	GCI-Lecturer-Student

11	22-Nov-2024	Innovative Urban Tunneling and Deep Excavation Techniques	GGG	Geomaple Geotechnics Inc.	GGG, GCI, External Engineers
12	25-Nov-2024	Workshop on Emerging energy transition technology	GIM		Lecturers and students of ITC
13	6-Dec-2024	Monozukuri workshop 2024	GIM		32 students from I5-GIM
14	17-Dec-2024	Remote Sensing	GGG	Caraga State University	GGG-Students
15	18-Dec-2024	BIM: The future of Design and Construction	FGC-GAR	Archetype Cambodia	GAR-Lecturer-Student
16	18-Dec-2024	GIS	GGG	Caraga State University	GGG-Students
17	26-Dec-2024	Seminar on water supply study in Cambodia shared by Mr. Shin Kato	GRU		40 Students participants from I4-WEE
18	8-Jan-2025	Sharing session by Vital at ITC	GIM		20 students from I5-GIM
19	8-Jan-2025	Panasonic training at ITC	GIM		105 students from I5-Meca, I4-Meca and T2MSB
20	15-Jan-2025	Seminar on Internship Opportunities at Korea EdTech	GIC	Korea EdTech	GIC students
21	15-Jan-2025	Seminar on Water treatment Technologies & solution	UIL, GCA, GRU	YCHEM Solution Service	GCA, GRU students
22	15-Jan-2025	Training session of water scarcity and water security: definitions, concepts and analytical frameworks.	GRU		9 Participants selective from GRU and Cambodia Water Partnership
23	15-Jan-2025	Panasonic training at ITC	GIM	Panasonic	105 students from I5-Meca, I4-Meca and T2MSB
24	18-Jan-2025	Recognizing and avoiding data privacy threats	GIC	Ministry of Post	GIC students
25	22-Jan-2025	Tnot d'or awards 2025 " Technical Innovation of Mango Products for Market Penetration	UIL, GCA	Confirel Co., Ltd	GCA, GGG, students
26	31-Jan-2025	International Symposium on Delta Droughts	GRU		42 Participants from ITC, ASEAN, Netherland
27	8-Feb-2025	Empowering the Future: Water Skills for the Next Generations”	GRU	GRU Lab.	MISTI, MoWRAM, MoWA, GS, K&K Pipe Cambodia, WaterAid Cambodia, CSW, K-Geo Solutions, GIANT
28	8-Feb-2025	The 4 GRU and MWEE Alumni Meeting and Party	GRU	GRU and MWEE Alumni	200 participants from GRU and MWEE alumni

					and staffs. Some alumnus come from different organization and company
29	14-Feb-2025	Business Model Training by Ms. Charkry Choeun, BD under ARES-CCD (R2)	RIC		RIC and UIL
30	28-Feb-2025	Panasonic training at ITC	GIM	Panasonic	53 students from I5-Meca, I4 Meca and T2MSB
31	28-Feb-2025	Low Carbone Concrete	FGC-GCI	SIKA Cambodia	150 students from I3GCI, Lecturers
32	05-Mar-2025	Panasonic training at ITC	GIM	Panasonic	53 students from I5-Meca, I4 Meca and T2MSB
33	07-Mar-2025	Daikin Training at ITC	GIM	Daikin	55 I4 Meca and T1MSB
34	12-Mar-2025	Panasonic training at ITC	GIM	Panasonic	53 students from I5-Meca, I4 Meca and T2MSB
35	23-Apr-2025	Wall Paint Product-TOA	FGC-GCI	TOA Cambodia	170 students from I4GCI, I4GAR, and lecturers
36	23-Apr-2025	TOA COATING CAMBODIA CO., LTD	GCI	TOA	
37	28-May-2025	De heus (Cambodia) Co., Ltd	GCA	De Heus	60 students I4
38	21-May-2025	Natural Gas, LNG (21-25 May 2025)	GGG	TotalEngies, Total Professeur Associé	42 students from I5-GGG and I4-GGG, General Deparment of Petroleum staff.
39	22-May-2025	Offshore Field Development Concepts and Facilities (21-25 May 2025)	GGG	TotalEngies, Total Professeur Associé	45 students from I5-GGG and I4-GGG, General Deparment of Petroleum staff.
40	28-May-2025	Internship opportunities at Institut Pasteur du Cambodge (IPC)	GIC	Institut Pasteur du Cambodge	55 students from I4-GIC and I3-GIC, 1 GIC-lecturer and 2 IPC-staffs.

Annex 49. Joining Seminars and Workshops Organized by External Entities.

No .	Date (DD-MM-YY)	Subject	Organizer	Participate	Faculty/Department
1	17-Jun-2024	Online Training of IP Registration	CapFish and AIT by Prof. Anil	Dr. Molika Yin (Head of UIL) Dr. Davin Sang (Deputy-Head of UIL) Dr. Elen Morm (Lecturer of GCA)	UIL, GCA
2	7-Aug-2024	Improvement of Road Safety & Air Quality in Cambodia Through Intelligent Traffic Management (IRSAQ): Invitation to the training workshop on Data Management and Protection and Air Quality Monitoring and Mitigation Measures	GIZ, DKT, MPWT	Ms. YANG Panha and students	GTI
3	8-Aug-2024	The Project for Capacity Development on Comprehensive Traffic Management Planning and Traffic Control Center Operation and Maintenance in Phnom Penh Capital City (PPTMTC).	JICA	Dr. PHUN Veng Kheang Ms. YANG Panha Dr. SAUM Narith and students	GTI
4	14-Oct-2024	AI Revolution and Readiness for Cambodia	Ministry of Land	GIC I3 students	GIC
5	21-Oct-2024	Road Design Specification: Stakeholder (21-22/10/2024)	MPWT	Dr. KAN Kuchvichea Dr. Chea Savuth Dr. Pov Keangse Mr. Mao Kunthea Dr. Oeung Thaileng	GCI
6	8-Nov-2024	Scholarships to study in Japan	CJCC	Dr. Molika Yin (Head of UIL)	30 Foundation Year Students
7	9-Dec-2024	Sharing session on "Preparing for Tech Jobs"	Ky Vilayvann	GIC I5 students	GIC
8	14-Jan-2025	Launching Patent and Industrial Design by MISTI	MISTI	Dr. Molika Yin (Head of UIL)	UIL
9	21-Feb-2025	Cambodia IP Education Seminar	ERIA	Dr. Davin Sang (Deputy-Head of UIL)	UIL
10	23-Feb-2025	Understanding Sustainability & Inclusivity in Shophouses	B4P and Kambujaya	Mr. VENH Lay Ou	GAR

11	25-Feb-2025	Regional Training seminar on Institutional IP Policies for ASEAN TISCS and TTOs (25-26/02/2025)	MOC and WIPO	Dr. Davin Sang (Deputy-Head of UIL)	UIL
12	27-Feb-2025	WIPO Regional meeting on Strengthening the ASEAN Regional Technology and Innovation support center (TISC) Network (27-28/02/2025)	MOC and WIPO	Dr. Davin Sang (Deputy-Head of UIL)	UIL
13	3-Mar-2025	STI Workshop in Thailand	JICA	Dr. Long Bun (Deputy-Director) Dr. Chanmoly Or (Director of RIC) Dr. Molika Yin (Head of UIL) Ms. Chikako Sasaki (Coordinator of JICA)	Direction, RIC, UIL, JICA
14	3-Mar-2025	Technology and Innovation Support Centers (TISCs) Training Workshop on TISC project management and patent search skill-building (3-4/03/2025)	MOC and WIPO	Dr. Davin Sang (Deputy-Head of UIL) and students	UIL
15	14-Mar-2025	Online L&T seminar conducted by Curtin Malaysia on "From Classroom to Startup: The Journey of Entrepreneurship" and From Classroom to Startup: The Journey of Entrepreneurship"	Curtin Malaysia	Dr. Samneang Chea (International Program Coordinator) Dr. Molika Yin (Head of UIL)	Malaysia
16	08-Apr-25	Training on legal documents ARES-R1 1. Intellectual Assignment agreement 2. Consulting or Training Service Contract	ARES	Dr. YIN Molika	UIL

Annex 50. Industry Visit to ITC.

No.	Date (DD-MM-YY)	Industries	Subject	Participant (ITC)	Faculty/Department
1	18-Mar-2024	Australian Department of Foreign Affairs and Trade (DFAT)	Discuss about impacts of climate change on Cambodia	Dr. Chhuon Kong (Dean of GRU) Dr. KET Pinnara (Vice-dean of GRU)	GRU
2	13-Jun-2024	JICA Japan	Getting some input for LBE phase 2 and discussing collaboration works (research projects, students mobility staff capacity building, etc.)	Dr. Eng Chandoeun (Dean of GGG) Dr. Pech Sopheap (Vice-dean of GGG) Dr. Yos Phanny Dr. Sio Sreymean Dr. Boeurt Sophea Dr. Mao Pisith Mr. Heng Ratha	GGG
3	19-Jun-2024	Ministry of Interior	Discuss about the canned product development	Dr. Yin Molika (Head of UIL) Dr. Phat Chanvorleak (Head of FTN) Dr. Mith Hasika (Lecturer and Researcher of FTN) Dr. Morm Elen (Lecturer of GCA)	UIL, FTN, GCA
4	3-Jul-2024	Panasonic	Introducing new president of Panasonic	H.E. Prof. Dr. PO Kimtho (Director) Dr. Molika Yin (Head of UIL)	Direction, UIL
5	4-Jul-2024	Shandong Dolang Technology Equipment	To explore collaborative opportunities 1. CEO of Shandong Dolang Technology Equipment 2. Ms.Carina Jing, Manager of International department 3. Mr. Samrithy In, Executive Director of PRI 4. Mr. Rath Sophak, Technical Advisor for PRI 5. Coordinator: Ms.Hang Chuon Nanita	Dr. Long Bun (Deputy-Director) Dr. Molika Yin (Head of UIL)	Direction, UIL

6	18-Jul-2024	Nippon Koei Co., LTD	Discuss the problematic soils research, including Expensive soils, Erosion soils, and dispersion soils... in Cambodia, as well as explore the potential research interest for collaboration.	Dr. Eng Chandoeun (Dean of GGG) Dr. Horng Vuthy Dr. Por Sopheap Dr. Mao Pisith Mr. Kaing Sainglong	GGG
7	19-Jul-2024	Vision 26 Optical Manufacturing (Cambodia)	To explore collaborative opportunities, including student internship and job opportunity	Dr. Molika Yin (Head of UIL) Dr. Saosameth Chhith (Deputy-Head of GIM)	UIL, GIM
8	20-Jul-2024	KSB Company from Singapore	Sharing the overview on water development in Cambodia	Dr. Chhuon Kong (Dean of GRU)	GRU
9	22-Jul-2024	FAO	To discuss about the arrangement of the Food Safety Exhibition event at ITC	Dr. Molika Yin (Head of UIL) Dr. Phat Chanvorleak (Head of FTN)	UIL, FTN
10	26-Jul-2024	K&K Pipe Cambodia	Meeting for revise the MoU between ITC and K&K Pipe Cambodia	Dr. Chhuon Kong (Dean of GRU)	GRU
11	30-Jul-2024	Plan Cambodia	To explore collaborative opportunities	Dr. Ty Soy (Deputy-Director) Dr. Molika Yin (Head of UIL)	Direction, UIL
12	30-Jul-2024	KSB Company from Singapore	To explore collaborative opportunities	Dr. Ty Soy (Deputy-Director) Dr. Molika Yin (Head of UIL)	Direction, UIL
13	31-Jul-2024	SDF Evaluation Team	To interview and evaluate the proposal for Program@School (the 28 training courses)	Dr. Molika Yin (Head of UIL) Representative Trainers	UIL, Relevant Department
14	14-Aug-2024	Go Study	Meet with Chinese Language Expert to discuss the Chinese course arrangement in ITC	Dr. Ty Soy (Deputy-Director) Dr. Molika Yin (Head of UIL)	Direction, UIL
15	22-Aug-2024	Confirel Co., Ltd	Discuss about possible collaborations and MoU	Dr. Molika Yin (Head of UIL) Dr. Phat Chanvorleak (Head of FTN)	UIL, FTN
16	28-Aug-2024	Global Consultant for Australia Government	Climate Change Resilience Program	Dr. Chhuon Kong (Dean of GRU)	GRU
17	4-Sep-2024	VP.Start	Visual discussion on sponsorship for the ITC 60th Anniversary	Dr. Molika Yin (Head of UIL)	UIL

18	13-Sep-2024	Mahidol University, Prof. Jitladda Sakdapipanich	Discuss about possible collaborations and providing the seminar for GGG students on Rubber Technology	Dr. Long Bun (Deputy-Director) Dr. Molika Yin (Head of UIL) Dr. Phanny Yos (Deputy-Director of RIC)	Direction, UIL, RIC
19	22-Oct-2024	Website Developer (Mr. Darith Lok)	Discuss about UIL Website development supported by ARES- CCD (R1)	Dr. Chanmoly Or (Director of RIC) Dr. Molika Yin (Head of UIL)	RIC, UIL
20	8-Nov-2024	WaterAid Cambodia	Discussion on strengthening for water related collaboration project	Dr. Chhuon Kong (Dean of GRU)	GRU
21	8-Nov-2024	RUAS Netherland	Collaboration between ITC and RUAS Netherland	Dr. Chhuon Kong (Dean of GRU) Dr. KET Pinnara (Vice-dean of GRU)	GRU
22	20-Nov-2024	Denso Cambodia	Interview ITC students from GIM, GIC, and AMS for internship in Denso Thailand	Dr. Chhith Saosometh (Vice-Head of GIM)	GIM
23	25-Nov-2024	Japanese companies	To recruit Civil and Electrical Engineers to work in Japan	Dr. Ty Soy (Deputy-Director) Dr. Molika Yin (Head of UIL) Dr. Virak Han (Dean of GCI) Dr. Phok Chrin (Head of GEE)	Direction, UIL, GCI, GEE
24	5-Dec-2024	Go Study and their university partners from China	Discuss about possible collaborations and sharing course for GCI and GRU students	Dr. Ty Soy (Deputy-Director) Dr. Molika Yin (Head of UIL) Dr. Virak Han (Dean of GCI) Dr. Chhuon Kong (Dean of GRU)	Direction, UIL, GCI, GRU
25	6-Dec-2024	Good Neighbors Cambodia, LG-KOICA Project for TVET	Discuss about possible collaborations	Dr. Long Bun (Deputy-Director) Dr. Molika Yin (Head of UIL)	Direction, UIL
26	6-Dec-2024	CAS-BIZTechnology (Certipoint)	Discuss about possible collaborations: Invited ITC to be their Certipoint Authorized Testing Centers in Cambodia Mr. Sam Piseth: Director Mr. Soun Sophea: Deputy Director	Dr. Molika Yin (Head of UIL) Dr. Saosameth Chhith (Deputy- Head of GIM) Ms. Seak Leng (Deputy-Head of GIC) Mr. Chanly Has (Head of GAI)	UIL, GIM, GIC, GAI
27	11-Dec-2024	CE&P Corporation Ltd	To discuss about professional training for CE&P and joint proposal for SDF (6 courses)	Dr. Molika Yin (Head of UIL) Dr. Saosameth Chhith (Deputy- Head of GIM)	UIL, GIM

28	17-Dec-2024	Cambodian Natural Gas Corp., LTD.	Discuss about possible collaborations and MoU	Dr. Eng Chandoeun (Dean of GGG) Dr. Mao Pisith	GGG
29	24-Dec-2024	Go Study	Meet with Prof. Zhao to discuss about possible collaborations	Dr. Ty Soy (Deputy-Director) Dr. Molika Yin (Head of UIL) Dr. Virak Han (Dean of GCI)	Direction, UIL, GCI
30	24-Dec-2024	Mesco Gold (Cambodia)	Discuss about possible collaborations and MoU	Dr. Eng Chandoeun (Dean of GGG) Dr. Mao Pisith	GGG
31	9-Jan-2025	Confirel Co., Ltd	To sign MoU	H.E. Prof. Dr. PO Kimtho (Director) Dr. Long Bun (Deputy-Director) Dr. Molika Yin (Head of UIL) Relevant Departments	Direction, UIL
32	9-Jan-2025	LiNeng International (Cambodia) Power Co., LTD	Collaboration between ITC and LiNeng International (Cambodia) Power Co., LTD, and mainly focusing on staff and intern recruitment to work in their company	Dr. Molika Yin (Head of UIL) Dr. Saosameth Chhith (Deputy-Head of GIM) Dr. Kimleang Khoeurn (Vice-Dean of GCA) Mr. Koksai Chou (Deputy-Head of GEE)	UIL, GCA, GEE, GIM
33	13-Jan-2025	Confucius Institute	Discuss about possible collaborations	Dr. Ty Soy (Deputy-Director) Dr. Molika Yin (Head of UIL) Relevant Departments	Direction, UIL
34	14-Jan-2025	Rating Agency of (Cambodia) Plc.	To sign MoU	H.E. Prof. Dr. PO Kimtho (Director) Dr. Long Bun (Deputy-Director) Relevant Departments	Direction, UIL
35	20-Jan-2025	ISCO	Discuss about possible collaborations	Dr. Ty Soy (Deputy-Director) Dr. Molika Yin (Head of UIL) Relevant Departments	Direction, UIL
36	24-Jan-2025	Prince Foundation	To advertise / introduce their scholarship for ITC students	Dr. Ty Soy (Deputy-Director) Dr. Molika Yin (Head of UIL) Ms. Phary Koy (Head of Finance Office)	Direction, UIL, Finance Office

37	6-Feb-2025	Lanmei Training Center	Lanmei (Cambodia) Training Center Explores Strategic Partnership with ITC to Enhance Aircraft Maintenance Education. The proposed collaboration includes two integrated program options: 1. Associate Degree Program: One year of study at ITC, followed by two years at Lanmei (Cambodia) Training Center. 2. Engineering Degree Program: Three years of study at ITC, followed by two years at Lanmei.	Dr. Molika Yin (Head of UIL) Dr. Sarin Chan (Head of GIM)	UIL, GIM
38	13-Feb-2025	Honda (Cambodia)	Strengthening collaboration	H.E. Prof. Dr. PO Kimtho (Director) Dr. Molika Yin (Head of UIL)	Direction, UIL
39	15-Feb-2025	The International Association for Hydro-Environment Engineering and Research (IAHR)	Discuss about possible collaborations	Dr. Chhuon Kong (Dean of GRU) Dr. KET Pinnara (Vice-dean of GRU)	GRU
40	18-Feb-2025	Sumitomo Cooperation	Strengthening collaboration	Dr. Ty Soy (Deputy-Director) Dr. Molika Yin (Head of UIL) All Relevant Person	Direction, UIL
41	19-Feb-2025	GFA Consulting Group (GFA)	Discuss about possible collaborations on water sector	Dr. Chhuon Kong (Dean of GRU) Dr. KET Pinnara (Vice-dean of GRU) Dr. PENG Chanthol (Head of WAE)	GRU, WAE
42	19-Feb-2025	ASEA-UNINET	Discuss about possible collaborations and MoU	Dr. Long Bun (Deputy-Director) Dr. Molika Yin (Head of UIL) Dr. Malyna Suong Relevant Departments	Direction, UIL, RIO
43	19-Feb-2025	Khamsa Group of Businesses	Introduce Khamsa Group of Businesses and seek for collaboration with ITC	Dr. Molika Yin (Head of UIL)	UIL

44	21-Feb-2025	Thai Beverage Public Company Limited (Thai Bev.)	Thai Beverage Public Company Limited (Thai Bev.) and the Institute of Technology of Cambodia (ITC) have initiated a strategic partnership to enhance education and career opportunities. In a recent meeting at ITC, both parties discussed academic collaboration, student career development, and industry engagement.	Dr. Ty Soy (Deputy-Director) Dr. Long Bun (Deputy-Director) Dr. Molika Yin (Head of UIL) Dr. Saosameth Chhith (Deputy-Head of GIM) Dr. Phok Chrin (Head of GEE) All Relevant Person	Direction, UIL, GIM, GEE
45	24-Feb-2025	Cambodia Chamber of Commerce	To discuss about professional training for member of CCC and joint proposal for SDF (6 training) and seeking for the support from CCC to organize the venture spark business matching event (at ITC on 24 April 2025).	Dr. Molika Yin (Head of UIL) Dr. Phat Chanvorleak (Head of FTN) Ms. Chakrya Choeun (Business Developer of ITC)	UIL, FTN, RIC
46	27-Feb-2025	AI Farm	Discuss about possible collaborations (presentation of their products) and MoU	Dr. Long Bun (Deputy-Director) Dr. Molika Yin (Head of UIL) All Relevant Person	Direction, UIL
47	6-Mar-2025	Firemax and NUS	Discuss about possible collaborations: providing training for ITC students	Dr. Malyna Suong (Deputy-Head of RIO) Dr. Molika Yin (Head of UIL) Dr. Virak Han (Dean of GCI) Dr. Sarin Chan (Head of GIM) Dr. Sivmey Hor (Vice-Dean of GCA) Dr. Kimleang Khoeurn (Vice-Dean of GCA)	RIO, UIL, GCI, GIM, GCA
48	10-Mar-2025	Khamsa Group of Businesses	Discuss about possible collaborations and MoU: Joint research, technology transfer, student internship and job opportunity	Dr. Molika Yin (Head of UIL) Dr. Sarot Srang (Lecturer of GIM) Dr. Sothea Has (Lecturer of AMS)	UIL, GIM, AMS

49	17-Mar-2025	Suntel Technology Cambodia Co., Ltd.	Discuss about possible collaborations and introducing the company: 1. Mr. Siek Sovann, CEO 2. Mr. Keo Ra, HR Supervisor 3. Mr. Huor Kimhak, Senior IT 4. Mr. But Sopha, Public Relations and Community Liaison	1. Dr. Yin Molika (Head of UIL) 2. Dr. Valy Dona (Head of MIT) 3. Dr. Phauk Sokkey (Head of AMS) 4. Ms. Seak Leng (Deputy-Head of GIC)	UIL, MIT, AMS, GIC
50	19-Mar-2025	KVRX2	Nutrition data for snail	Dr. Malyna Suong (Deputy-Head of RIO) Dr. Molika Yin (Head of UIL) Dr. Phat Chanvorleak (Head of FTN)	RIO, UIL, FTN

Annex 51. ITC Lecturers and Students Visit to Industries.

No.	Date (DD-MM-YY)	Industries	Subject	Participant	Faculty/Department
1	5-Jul-2024	Sihanoukville Autonomous Port	Visit Sihanoukville Autonomous Port	Ms. YANG Panha , Dr. HAM Ramrav, Dr. SAUM Narith , I4-GTI	GTI
2	5-Apr-2024	Vital Premium Water NVC Corporation Co., Ltd One More Manufacturing Co., Ltd (Mee Chiet)	Student Visit to company	Mr. SOK Kimheng, Top 50 I4-GIC Student	GIC
3	2-Aug-2024	X-Water Technology Co., Ltd	Educational Student visit	Dr. BUN Saret, Mr. Lun Sambo, and I4-WEE and T1-WSP	GRU
4	3-Aug-2024	Landfill in Preah Sihanouk	Educational Field Visit to Landfill in Preah Sihanouk	Dr. BUN Saret, Mr. Lun Sambo, and I4-WEE and T1-WSP	GRU
5	4-Aug-2024	Anco Water Supply	Educational Student visit	Dr. BUN Saret, Mr. Lun Sambo, and I4-WEE and T1-WSP	GRU
6	7-Dec-2024	DENSO Cambodia	Monozukuri workshop training on basic IoT	Dr. Chhith Saosometh, Mr. Mut Mesa, Mr. Keo Chivorn	GIM
7	6-Jan-2025	AFD	Project progress and possible project collaboration	Dr. Chhuon Kong, Mr. Nhem Sophal	GRU
8	8-Jan-2025	Cambodia Water Partnership (CWP)	Project collaboration on Water Scarcity Program in Cambodia	Dr. Chhuon Kong, Dr. HENG Sokchhay	GRU
9	10-Jan-2025	Kampot K-Cement	Educational Field Visit to Kampot K-Cement	Mr. Sou Senrong, Mr. Chork Vuthy, and I4-WRI students	GRU
10	15-Jan-2025	Bueng Cherng Ek Wastewater Treatment	Educational Field Visit to Bueng Cherng Ek Wastewater Treatment in Phnom Penh	Mr. Hong Penghour, Ms. PHOEURN Chan Arun, and I5-WEE	GRU
11	6-Feb-2025	Cambodia Chamber of Commerce	To discuss about professional training for member of CCC and joint proposal for SDF (6 training)	Dr. Molika Yin (Head of UIL) Dr. Phat Chanvorleak (Head of FTN) Dr. Sereyvath Yoeun (Researcher of FTN)	UIL, FTN

12	7-Feb-2025	Ministry of Water Resources and Meteorology	Educational Field visit to flood relief and diversion system from Phnom Penh at Kampong Speu	Dr. Chhuon Kong, Dr. Song Layheang, Mr. Hun Ketya, Mr. Chork Vuthy, Mr. Chan Rathboren, and I4-WRI and I5-WRI students	GRU
13	02-April-2025	Chip Mong Insee-Cement	Site visit Chip Mong Cement factory	50 students from I4GCI and Lecturers	GCI
14	10-April-2025	Kambujaya	Kambujaya Shophouse Project	Mr. LEU Leanghong, Mr. VENH Lay Ou, and I3GAR students	GAR
15	21-Apr-2025	CONFIREL DISCOVERY	Student Visit to company	H.E.Prof. Dr. PO Kimtho (Director of ITC) Dr. HIN Raveth (GS) H.E.Asst. Prof. Dr. MITH Hasika (GCA) Dr. CHRIN Pork (GEE) Dr. ORM Sokchea (GEE)	GCA, GIM, GEE
16	10-May-2025	SOUTHEAST ASIA BRANCH OF CHINA RAILWAY URBAN CONSTRUCTION GROUP CO., LTD.	To discuss about job and internship opportunity and join research projects	Mr. VENH Lay Ou	GAR
17	23-May-2025	Chip Mong Industries	Site Visite Chip Mong Industries	Mr. LY Hav, Ms. BUN Polyka, Ms. EA Monika, I3GCI (PP and TBK)	GCI

Annex 52. Projects, Training and Consulting Services for Private Sectors.

No.	Date	Type of service	Subject	Industries	Coordinator and Trainers	Faculty/Depart
1	April 2024-December 2025	Project	ASEAN-Norwegian Cooperation Project on Regional Capacity Building for Reducing Plastic Pollution Phase 2 (ASEANO2)	Norwegian Institute for Water Research (NIVA)	Dr. Chhuon Kong	GRU
2	3-Jul-24	Project	Development of a robotic platform	International Center for Neuromphic Systems, Western Sydney University	Dr. SRANG Sarot	GIM
3	5-Jul-24	Project	Product development for the meat products	Ministry of Interior (Cambodia)	Dr. MORM Elen	GCA
4	9-Jul-24	Project	Analysis of pesticide content in water in Kanghot and Rovieng irrigation chemes	CIRAD	Dr. PHAT Chanvorleak	FTN
5	12-Aug-24	Project	Project RP-013 (CAPfish Project Round II)	CAPFish - UNIDO	Dr. TAN Reasmey	GCA
6	12-Aug-24	Project	Project RP-015 (CAPfish Project Round II)	CAPFish - UNIDO	Dr. Mith Hasika	GCA
7	12-Aug-24	Project	Project RP-016 (CAPfish Project Round II)	CAPFish - UNIDO	Dr. IN Sokneang	GCA
8	12-Aug-24	Project	Project RP-023 (CAPfish Project Round II)	CAPFish - UNIDO	Dr. IN Sokneang	GCA
9	12-Aug-24	Project	Project RP-018 (CAPfish Project Round II)	CAPFish - UNIDO	Dr. PENG Chanthol	GCA
10	12-Aug-24	Project	Project RP-009 (CAPfish Project Round I)	CAPFish - UNIDO	Dr. Morm Elen	GCA

11	26-Sep-24	Project	Research on poverty alleviation and food security for stallholder farmers in Cambodia in the ACIAR project CROP/2023/129	Australian Centre for Robotics, Digital Sciences Initiative - Agriculture	Dr. SRANG Sarot	GIM
12	2-Aug-24	Training	Short course training on "Construction project management" - Payment by company	Mega Asset Management - MAM	Dr. YIN Molika	UIL
13	5-Sep-24	Training	Short course training on "Introduction to data analytic with Spreadsheet SQL and Python" - Partly supported by SMP	Lotus Green Team Co., Ltd	Dr. YIN Molika	UIL
14	23-Oct-24	Training	Training on "Technical Certificate in House Connection and Water Supply"	Phnom Penh Water Supply Authority	Dr. KET Pinnara	GRU
15	30-Oct-24	Training	Training on "Electrical System Control"	SNKRP Co., Ltd	Mr. CHOU Kosal	GEE
16	June 2024 - February 2025	Project	Support the restoration of the Preah Vihear Temple's Gopura V (Phase II)	Archaeological Survey of India	Dr. Chhuon Kong	GRU
17	February 2025 - December 2025	Project	Support the restoration of the Preah Vihear Temple's Gopura V (Phase III)	Archaeological Survey of India	Dr. Chhuon Kong	GRU
18	February 2025 - July 2025	Project	Water Scarcity Project in Cambodia	FAO	Dr. Chhuon Kong	GRU
19	January - December 2025	Project	Enhanced Durability and Sustainability of Asphalt Concrete through Waste Plastic Recycling	IKEE	Dr. KAN Kuchvichea	GCI

Annex 53. Memoranda of Understanding and Memoranda of Agreement with Industry.

No.	Name of partner	Sector	Agreement type	Effective Date	Expiration Date	Outcome	Country
1	SATO KOGYO	Industry	MoU	23-Jul-2024	23-Jul-2029	Establish a cooperative relationship between ITC and Sato Kogyo including R&D, Education & training, Infrastructure Development, and Community Engagement.	Japan
2	Phnom Penh Autonomous Port (PPAP)	Organization	MoU	7-Oct-2024	7-Oct-2027	Scholarship, Internship, Training 2022-2023 recruited 25 interns 2022-2023 recruited 19 interns	Cambodia
3	HOTEL OFURO Co., Ltd.	Industry	MoU	2-Dec-2024	N/A	Internship student program in Japan	Japan
4	Renaissance Minerals (Cambodia) Limited	Industry	MoU	4-Dec-2024	4-Dec-2027	<ul style="list-style-type: none"> • Development of academic curricula and professional training programs • Exchange of academic and industry expertise through guest lectures, seminars, and workshops • Facilitation of internships and practical training opportunities for ITC students 	Cambodia
5	Confirel Co., Ltd	Industry	MoU	9-Jan-2025	9-Jan-2028	Skill Development, Joint Research, Intellectual Properties, Lab Partnership	Cambodia
6	Rating Agency of (Cambodia) Plc.	Industry	MoU	14-Jan-2025	14-Jan-2027	Cooperation on the technical support of ITC on the Assurance Engagement	Cambodia
7	Tekoma Energy KK	Industry	MoU	28-Feb-2025	28-Sep-2025	Provide internship for year 5 students from GCI (1) and GEE (1) in Japan	Japan
8	BRANCH OF PANASONIC ASIA PACIFIC PTE., LTD	Industry	MoU	18-Mar-2025	18-Mar-2028	Provide Scholarship Internship Training Opportunity at ITC to ITC's students from Department GIM	Japan

9	Huawei Technologies (Cambodia)	Industry	MoU	29-Apr-2025	N/A	<ul style="list-style-type: none"> • To establish a Regional ICT Training Center at ITC • Provide training platforms, academic courses, Train-the-Trainer programs, exam vouchers, laboratory equipment, and laptops. <p>Offer internships and training placements for ITC students</p>	China
10	Khamisa Group of Business (KGB)	Industry	MoU	3-Jun-2025	3-Jun-2028	To establish a framework for collaboration between ITC and KGB in the fields of robotics, artificial intelligence (AI), the Internet of Things (IoT), and other emerging technologies	Cambodia



ACADÉMIE
DE RECHERCHE ET
D'ENSEIGNEMENT
SUPÉRIEUR



AUN/SEED-Net jica



Address:

Russian Confederation Boulevard, P.O. BOX 86, Phnom Penh, Cambodia

Telephone: +855 (0)23 880 370, Fax: +855 (0)23 880 369

Website: www.itc.edu.kh ; Email: info@itc.edu.kh